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CONTENTS.

	Page.
I.—WAGES IN FOREIGN COUNTRIES.....	I
II.—RUSSIAN IRON ORE AND IRON INDUSTRIES.....	13
III.—OUTLOOK FOR CEREALS IN RUSSIA.....	15
IV.—RUSSIAN COMMERCE IN 1895.....	17
V.—RUSSIAN COMMERCIAL TRANSACTIONS ON A GOLD BASIS.....	20
VI.—CURRENCY OF RUSSIA.....	21
VII.—GOLD CERTIFICATES IN RUSSIA.....	22
VIII.—NEW PROCESS FOR KEEPING FRUIT GREEN..... <i>du Bellet</i>	24
IX.—HORSELESS CARRIAGES IN FRANCE..... <i>Chancellor</i>	25
X.—TAXATION OF MINERALS IN MEXICO..... <i>Crittenden</i>	27
XI.—A UNITED STATES BOND COMPANY'S CONTRACT..... <i>Butler</i>	31
XII.—UNITED STATES TRADE WITH MEXICO..... <i>Gorman</i>	32
XIII.—TEHUANTEPEC RAILROAD CONTRACT..... <i>Butler</i>	33
XIV.—JAPANESE COMMERCE WITH CHINA AND KOREA.....	34
XV.—COMMERCIAL ADVANTAGES OF THE CHINESE-JAPANESE TREATY.....	36
XVI.—TRADE OF FORMOSA.....	38
XVII.—MISREPRESENTATION OF AMERICAN CANNED GOODS..... <i>Fowler</i>	41
XVIII.—TROUT FARMING IN BOHEMIA..... <i>de Kay</i>	41
XIX.—DRY-DOCK TOLLS AT KINGSTON, CANADA..... <i>Twitchell</i>	47
XX.—CYCLE SHOW AT TURIN..... <i>Mantius</i>	48
XXI.—ELECTRIC LAMP-POSTS.....	50
XXII.—WOODING OF DUNES IN DENMARK AND BELGIUM.....	51
XXIII.—NEW TARIFF OF NEWFOUNDLAND..... <i>Ryan</i>	53
XXIV.—NEW TARIFF OF BELGIUM..... <i>Roosevelt</i>	62
XXV.—WAGES AND FOOD PRICES IN AUSTRALIA..... <i>Maratta</i>	69
XXVI.—WAGES IN SWITZERLAND..... <i>Germain</i>	75
XXVII.—DRAINAGE OF LAKE COPAIS..... <i>Horton</i>	80
XXVIII.—ALCOHOLISM IN FRANCE..... <i>Chancellor</i>	83
XXIX.—FRENCH COGNAC BRANDY..... <i>Fitz Gerald</i>	86
XXX.—WINE MAKING IN FRANCE..... <i>Chancellor</i>	87
XXXI.—PRODUCTION OF SALT IN SPAIN.....	94
XXXII.—THE MINES OF HUELVA.....	96
XXXIII.—CLIMATE AND PUBLIC HEALTH OF MALAGA..... <i>Burke</i>	104
XXXIV.—A NEW GERMAN LAMP..... <i>de Kay</i>	107
XXXV.—FRUIT EVAPORATORS IN GERMANY..... <i>Wamer</i>	108

	Page.
XXXVI.—AMERICAN DRIED APPLES AT HAMBURG..... <i>Robertson</i>	110
XXXVII.—GERMAN MACHINES FOR THE UNITED STATES..... <i>Monaghan</i>	111
XXXVIII.—RETAIL AUCTION SHOPS IN LUXEMBURG..... <i>Murphy</i>	112
XXXIX.—AMERICAN VS. EUROPEAN TRADE SYSTEMS IN BRAZIL..... <i>Smith</i>	113
XL.—AMERICAN COTTON GOODS IN JAMAICA..... <i>Eckford</i>	114
XLI.—NOTES (Customs Regulations for the North and Baltic Sea Canal—Inter- national Naval Exhibition—"Made in Germany"—Hardening Steel by Gas—Swiss Official Commercial Organ—Cartagena-United States Mail Service—Italian Fruit Exports—Supplementary Tariff of the Dominican Republic—Affairs at Guaymas—California Products in Germany—Earthquake-proof Houses—Petroleum Monopoly in Ger- many—Increased Duty on Liquors in Mozambique—Consular Reports Reprinted Abroad—Consular Reports Transmitted to Other Depart- ments).....	116
XLII.—FOREIGN REPORTS AND PUBLICATIONS (British Trade Returns—Expo- sitions and Commercial Museums—Franco-Swiss Tariff War).....	123

REPORTS BY COUNTRIES.

	Page.
AUSTRALASIA:	
Wages and food prices in.....	69
AUSTRIA-HUNGARY:	
Trout farming in Bohemia.....	41
BELGIUM:	
New tariff of.....	62
Chamber of French commerce at Charleroi.....	124
Wooding of dunes in.....	52
BRAZIL:	
American vs. European trade systems in.....	113
CHINA:	
Misrepresentation of American canned goods.....	41
COLOMBIA:	
Cartagena-United States mail service.....	119
DENMARK:	
Electric lamp-posts in.....	50
Wooding of dunes in.....	51
DOMINICAN REPUBLIC:	
Supplementary tariff of the.....	119
CANADA:	
Dry-dock tolls at Kingston.....	47
FRANCE:	
Alcoholism in.....	73
Franco-Swiss commercial war.....	115
French cognac brandy in.....	86
Horseless carriages in.....	25
New process for keeping fruit green.....	24
Wine making in.....	87
GERMANY:	
A new lamp in.....	107
American dried apples in.....	110
California products in.....	120
Customs regulations for the North Sea and Baltic Canal.....	116
Fruit evaporators in.....	108
German machines for the United States.....	111
Hardening steel by gas in.....	118
International naval exhibition in.....	116
"Made in Germany".....	117
Petroleum monopoly in.....	121
GREECE:	
Drainage of Lake Copais.....	80
ITALY:	
Cycle show at Turin.....	48
Earthquake-proof houses in.....	120
Fruit exports in.....	119
JAMAICA:	
American cotton goods in.....	114

JAPAN:	Page.
Commercial advantages of the Chinese-Japanese treaty.....	36
Commerce with China and Korea.....	34
Trade of Formosa.....	38
LUXEMBURG:	
Retail auction shops in.....	112
MEXICO:	
Affairs in Guaymas.....	120
A United States bond company's contract.....	31
Taxation of cereals in.....	27
Tehuantepec railroad contract in.....	33
United States trade with.....	32
MOZAMBIQUE:	
Increased duties on liquors in.....	121
NEWFOUNDLAND:	
New tariff of.....	53
RUSSIA:	
Commercial museums in.....	125
Currency of.....	21
Gold certificates in.....	22
Outlook for cereals in.....	15
Commerce in 1895.....	17
Iron ore and iron industries in.....	13
Commercial transactions on a gold basis in.....	20
SPAIN:	
Climate and public health of Malaga.....	104
Production of salt in.....	94
The mines of Huelva.....	96
SWITZERLAND:	
Swiss official commercial organ.....	118
Wages in.....	75
UNITED KINGDOM:	
British trade during the first seven months of 1895.....	123
WORLD:	
Wages in foreign countries.....	I

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1894, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.2 cents in April, 1894, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—Countries with fixed currencies.

Countries.	Standard.	Monetary unit.	Value in terms of United States gold.	Coins.
Argentine Republic*....	Gold and silver...	Peso	\$0.96, 5	Gold—Argentine (\$4.82, 4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20, 3	Gold—20 crowns (\$4.05, 2) and 10 crowns.
Belgium.....	Gold and silver...	Franc.....	.19, 3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis .....	.54, 6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland)).	.... do.....	Dollar.....	1.00	
Chile‡.....	Gold and silver....	Peso .....	.91, 2	Gold—escudo (\$1.82, 4), doubloon (\$4.56, 1), and condor (\$0.12, 8); silver—peso and divisions.
Cuba.....	....do.....	....do.....	.92, 6	Gold—doubloon (\$5.01, 7); silver—peso.
Denmark.....	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Egypt.....	....do.....	Pound (100 piasters).	4.94, 3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	....do.....	Mark.....	.19, 3	Gold—10 and 20 marks (\$1.93 and \$3.85, 9).
France.....	Gold and silver....	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany.....	Gold	Mark.....	.23, 8	Gold—5, 10, and 20 marks.
Great Britain.....	....do.....	Pound sterling....	4.86, 6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver....	Drachma.....	.19, 3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti.....	....do.....	Gourde.....	.96, 5	Silver—gourde.
Italy.....	....do.....	Lira.....	.19, 3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Liberia.....	Gold	Dollar.....	1.00	
Netherlands‡	Gold and silver....	Florin.....	.40, 2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland.....	Gold	Dollar.....	1.01, 4	Gold—\$2 (\$2.02, 7).
Portugal.....	Gold	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Spain.....	Gold and silver....	Peseta.....	.19, 3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway...	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Switzerland.....	Gold and silver....	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey.....	Gold	Piaster.....	.04, 4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver....	Bolivar.....	.19, 3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875 the gold standard prevailed in the Argentine Republic. Its currency does not appear in the statements again until 1883, when the double standard prevailed, and the peso attained a fixed value of 96.5 cents.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ending July 1, 1892. The next quarter (October 1) inaugurated the gold standard (*see* note under table of "fluctuating currencies").

‡ The gold standard prevailed in Chile until January 1, 1890. The value of the peso has been the same under both standards.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

B.—Countries with fluctuating currencies, 1874-'90.

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver.....	Florin.....	\$0.47,6	\$0.45,3	\$0.45,3	\$0.41,3	\$0.40,1	\$0.39,8
Bolivia.....	.....do.....	Dollar until 1880; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America...	.....do.....	Peso.....	.96,5	.91,8	.91,8	.83,6	.....	.....
China.....	Silver.....	Haikwan tael....	1.61	1.61	.....	.....	.....	.....
Colombia.....	.....do.....	Peso.....	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador.....	.....do.....	.....do.....	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†.....	Gold.....	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India.....	Silver.....	Rupee.....	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan.....	{ Gold..... { Silver.....	{ Yen.....	{ .99,7 { .....	.99,7	.99,7	.99,7	.....	.....
Mexico.....	.....do.....	Dollar.....	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands ‡.....	Gold and silver..	Florin.....	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru.....	Silver.....	Sol.....	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia.....	.....do.....	Ruble.....	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli.....	.....do.....	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver.....	Florin.....	\$0.39,3	\$0.37,1	\$0.35,9	\$0.34,5	\$0.33,6	\$0.42
Bolivia.....	.....do.....	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America...	.....do.....	Peso.....	.....	.....	.....	.69,9	.68	.85
Colombia.....	.....do.....	.....do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador.....	.....do.....	.....do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†.....	Gold.....	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.93,3
India.....	Silver.....	Rupee.....	.37,8	.35,7	.34,6	.33,2	.32,3	.40,4
Japan.....	{ Gold..... { Silver.....	{ Yen.....	{ .....	.....	.99,7	.99,7	.99,7	.99,7
Mexico.....	.....do.....	Dollar.....	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru.....	Silver.....	Sol.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia.....	.....do.....	Ruble.....	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli.....	.....do.....	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (*see* CONSULAR REPORTS, No. 147, p. 623) established the gold standard.
† The Egyptian pound became fixed in value at \$4.94,3 in 1887.
‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—Quarterly valuations of fluctuating currencies, 1891-'94.

Countries.	Monetary unit.	1892.				1893.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Austria-Hungary *	{ Gold crown.....				\$0. 20, 3				
	{ Silver florin.....	\$0. 34, 1	\$0. 32, 8	\$0. 32					
Bolivia.....	Silver boliviano.	.69, 1	.66, 5	.64, 9	.61, 6	\$0. 61, 3	\$0. 61	\$0. 60, 4	\$0. 53, 1
Central America...	Silver peso.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
China†.....	{ Shanghai tael..	1.02, 1	.98, 2	.95, 8	.91	.90, 6	.90, 1	.89, 2	.78, 4
	{ Haikwan tael..	1.13, 7	1.09, 3	1.06, 7	1.01, 3	1.01	1.00, 4	.99, 4	.87, 4
Colombia.....	Silver peso.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
Ecuador.....	.....do.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
India.....	Silver rupee.....	.32, 8	.31, 6	.30, 8	.29, 3	.29, 2	.29	.28, 7	.25, 2
Japan‡.....	Silver yen.....	.74, 5	.71, 6	.69, 9	.66, 4	.66, 1	.65, 8	.65, 1	.57, 3
Mexico.....	Silver dollar.....	.75	.72, 2	.70, 4	.66, 9	.66, 6	.66, 2	.65, 6	.57, 7
Peru.....	Silver sol.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
Russia§.....	Silver ruble.....	.55, 3	.53, 1	.51, 9	.49, 2	.49, 1	.48, 8	.48, 3	.42, 5
Tripoli.....	Silver mahbub..	.62, 3	.60	.58, 5	.55, 5	.55, 3	.55	.54, 5	.47, 9
Venezuela |.....	Silver bolivar...	.13, 8	.13, 3	.13	.12, 3				

Countries.	Monetary unit.	1894.				1895.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.
Bolivia.....	Silver boliviano	\$0. 51, 6	\$0. 46, 5	\$0. 45, 7	\$0. 46, 4	\$0. 45, 5	\$0. 44, 1	\$0. 48, 6
Central America.....	Silver peso.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6
	{ Shanghai tael..	.76, 2	.68, 6	.67, 6	.68, 5	.67, 3	.65, 2	.71, 8
China†.....	{ Haikwan tael..	.84, 9	.76, 5	.75, 3	.76, 3	.74, 9	.75, 6	.80
	{ Tien-Tsin tael.				.72, 7	.71, 4	.69, 2	.76, 1
	{ Chefoo tael.....				.71, 7	.70, 4	.68, 3	.75, 1
Colombia.....	Silver peso.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6
Ecuador.....	.....do.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6
India.....	Silver rupee.....	.24, 5	.22, 1	.21, 7	.22	.21, 6	.21, 0	.23, 1
Japan‡.....	Silver yen.....	.55, 6	.50, 1	.49, 3	.50	.49, 1	.47, 6	.52, 4
Mexico.....	Silver dollar.....	.56	.50, 5	.49, 7	.50, 4	.49, 5	.47, 9	.52, 8
Persia.....	Silver kran.....							.48, 9
Peru.....	Silver sol.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6
Russia§.....	Silver ruble.....	.41, 3	.37, 2	.36, 6	.37, 1	.36, 4	.35, 3	.38, 9
Tripoli.....	Silver mahbub..	.46, 5	.41, 9	.41, 3	.41, 8	.41, 1	.39, 8	.43, 8

* Austria-Hungary had the silver standard up to August, 1892 (see note to "fluctuating" table B).

† China (silver). The Haikwan tael is the customs tael, and the Shanghai tael that used in trade. Consul-General Denny (CONSULAR REPORTS No. 43, p. 516) says: "The value of the tael varies in the different ports of China, and every port has two taels, one being the Government, or Haikwan, tael, in which all duties have to be paid, and the other the market tael, the former exceeding the latter by some 11 per cent."

‡ Gold is the nominal standard in Japan, but silver is practically the standard. The fixed value of the gold yen is 99.7 cents.

§ The gold ruble is valued at 77.2 cents. Silver is the nominal standard, but paper is the actual currency, and its depreciation is measured by the gold standard.

| The Venezuelan bolivar became fixed in value (19.3 cents) on January 1, 1892.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalent.
Almude.....	Portugal.....	4.422 gallons.
Ardeb.....	Egypt.....	7.6907 bushels.
Are.....	Metric.....	0.02471 acre.
Arobe.....	Paraguay.....	25 pounds.
Arratel or libra.....	Portugal.....	1.011 pounds.
Arroba (dry).....	Argentine Republic.....	25.3175 pounds.
Do.....	Brazil.....	32.38 pounds.
Do.....	Cuba.....	25.3664 pounds.
Do.....	Portugal.....	32.38 pounds.
Do.....	Spain.....	25.36 pounds.
Do.....	Venezuela.....	25.4024 pounds.
Arroba (liquid).....	Cuba, Spain, and Venezuela.....	4.263 gallons.
Arshine.....	Russia.....	28 inches.
Arshine (square).....	.....do.....	5.44 square feet.
Artel.....	Morocco.....	1.12 pounds.
Baril.....	Argentine Republic and Mexico.....	20.0787 gallons.
Barrel.....	Malta (customs).....	11.4 gallons.
Do.....	Spain (raisins).....	100 pounds.
Berkovet.....	Russia.....	361.12 pounds.
Bongkal.....	India.....	832 grains.
Bonw.....	Sumatra.....	7,096.5 square meters.
Bu.....	Japan.....	0.1 inch.
Butt (wine).....	Spain.....	140 gallons.
Caffiso.....	Malta.....	5.4 gallons.
Candy.....	India (Bombay).....	529 pounds.
Do.....	India (Madras).....	500 pounds.
Cantar.....	Morocco.....	113 pounds.
Do.....	Syria (Damascus).....	575 pounds.
Do.....	Turkey.....	124.7036 pounds.
Cantaro (Cantar).....	Malta.....	175 pounds.
Carga.....	Mexico and Salvador.....	300 pounds.
Catty.....	China.....	1.333 1/3 (1 1/3) pounds.
Do.....	Japan.....	1.31 pounds.
Do.....	Java, Siam, Malacca.....	1.35 pounds.
Do.....	Sumatra.....	2.12 pounds.
Centaro.....	Central America.....	4.2631 gallons.
Centner.....	Bremen and Brunswick.....	117.5 pounds.
Do.....	Darmstadt.....	110.24 pounds.
Do.....	Denmark and Norway.....	110.11 pounds.
Do.....	Nuremberg.....	112.43 pounds.
Do.....	Prussia.....	113.44 pounds.
Do.....	Sweden.....	93.7 pounds.
Do.....	Vienna.....	123.5 pounds.
Do.....	Zollverein.....	110.24 pounds.
Do.....	Double or metric.....	220.46 pounds.
Chih.....	China.....	14 inches.
Coyan.....	Sarawak.....	3,098 pounds.
Do.....	Siam (Koyan).....	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Cuadra.....	Argentine Republic.....	4.2 acres.
Do.....	Paraguay.....	78.9 yards.
Do.....	Paraguay (square).....	8.077 square feet.
Do.....	Uruguay.....	Nearly 2 acres.
Cubic meter.....	Metric.....	35.3 cubic feet.
Cwt. (hundredweight).....	British.....	112 pounds.
Dessiatine.....	Russia.....	2.6997 acres.
Do.....	Spain.....	1.599 bushels.
Drachme.....	Greece.....	Half ounce.
Dun.....	Japan.....	1 inch.
Egyptian weights and measures.....	(See CONSULAR REPORTS No. 144.)	
Fanega (dry).....	Central America.....	1.5745 bushels.
Do.....	Chile.....	2.575 bushels.
Do.....	Cuba.....	1.599 bushels.
Do.....	Mexico.....	1.54728 bushels.
Do.....	Morocco.....	Strike fanega, 70 lbs. ; full fanega, 118 lbs.
Do.....	Uruguay (double).....	7.776 bushels.
Do.....	Uruguay (single).....	3.888 bushels.
Do.....	Venezuela.....	1.599 bushels.
Fanega (liquid).....	Spain.....	16 gallons.
Feddan.....	Egypt.....	1.03 acres.
Frail (raisins).....	Spain.....	50 pounds.
Frasco.....	Argentine Republic.....	2.5096 quarts.
Do.....	Mexico.....	2.5 quarts.
Fuder.....	Luxemburg.....	264.17 gallons.
Garnice.....	Russian Poland.....	0.88 gallon.
Gram.....	Metric.....	15.432 grains.
Hectare.....	.....do.....	2.471 acres.
Hectoliter:		
Dry.....	.....do.....	2.838 bushels.
Liquid.....	.....do.....	26.417 gallons.
Joch.....	Austria-Hungary.....	1.422 acres.
Ken.....	Japan.....	4 yards.
Kilogram (kilo).....	Metric.....	2.2046 pounds.
Kilometer.....	.....do.....	0.621376 mile.
Klafter.....	Russia.....	216 cubic feet.
Kota.....	Japan.....	5.13 bushels.
Korree.....	Russia.....	3.5 bushels.
Last.....	Belgium and Holland.....	85.134 bushels.
Do.....	England (dry malt).....	82.52 bushels.
Do.....	Germany.....	2 metric tons (4,480 pounds).
Do.....	Prussia.....	112.29 bushels.
Do.....	Russian Poland.....	11¾ bushels.
Do.....	Spain (salt).....	4,760 pounds.
League (land).....	Paraguay.....	4,633 acres.
Li.....	China.....	2,115 feet.
Libra (pound).....	Castilian.....	7,100 grains (troy).
Do.....	Argentine Republic.....	1.0127 pounds.
Do.....	Central America.....	1.043 pounds.
Do.....	Chile.....	1.014 pounds.
Do.....	Cuba.....	1.0161 pounds.
Do.....	Mexico.....	1.01465 pounds.
Do.....	Peru.....	1.0143 pounds.
Do.....	Portugal.....	1.011 pounds.
Do.....	Uruguay.....	1.0143 pounds.
Do.....	Venezuela.....	1.0161 pounds.
Liter.....	Metric.....	1.0567 quarts.
Livre (pound).....	Greece.....	1.1 pounds.
Do.....	Guiana.....	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Load.....	England (timber).....	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 super- ficial feet.
Manzana	Costa Rica.....	1½ acres.
Marc.....	Bolivia.....	0.507 pound.
Maund.....	India.....	82½ pounds.
Meter.....	Metric	39.37 inches.
Mil.....	Denmark.....	4.68 miles
Do.....	Denmark (geographical).....	4.61 miles.
Morgen.....	Prussia.....	0.63 acre.
Oke.....	Egypt.....	2.7225 pounds.
Do.....	Greece	2.84 pounds.
Do.....	Hungary	3.0817 pounds.
Do.....	Turkey.....	2.85418 pounds.
Do.....	Hungary and Wallachia.....	2.5 pints.
Pic.....	Egypt.....	21¼ inches.
Picul.....	Borneo and Celebes.....	135.64 pounds.
Do.....	China, Japan, and Sumatra.....	133½ pounds.
Do.....	Java	135.1 pounds.
Do.....	Philippine Islands (hemp).....	139.45 pounds.
Do.....	Philippine Islands (sugar).....	140 pounds.
Pie.....	Argentine Republic.....	0.9478 foot.
Do.....	Castilian	0.91407 foot.
Pik.....	Turkey.....	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound).....	Denmark and Sweden.....	1.102 pounds.
Quarter.....	Great Britain.....	8.252 bushels.
Do.....	London (coal).....	36 bushels.
Quintal.....	Argentine Republic.....	101.42 pounds.
Do.....	Brazil.....	130.06 pounds.
Do.....	Castile, Chile, Mexico, and Peru.....	101.61 pounds.
Do.....	Greece	123.2 pounds.
Do.....	Newfoundland (fish).....	112 pounds.
Do.....	Paraguay.....	100 pounds.
Do.....	Syria.....	125 pounds.
Do.....	Metric	220.46 pounds.
Rottle.....	Palestine.....	6 pounds.
Do.....	Syria.....	5¾ pounds.
Sagen.....	Russia	7 feet.
Salm.....	Malta.....	490 pounds.
Se.....	Japan.....	3.6 feet.
Seer.....	India.....	1 pound 13 ounces.
Shaku.....	Japan.....	10 inches.
Sho.....	.....do.....	1.6 quarts.
Standard (St. Petersburg).....	Lumber measure.....	165 cubic feet.
Stone	British	14 pounds.
Suerte.....	Uruguay.....	2,700 cuadras (<i>see cua-</i> <i>dra</i>).
Tael	Cochin China.....	590.75 grains (troy).
Tan.....	Japan.....	0.25 acre.
To.....	.....do.....	2 pecks.
Ton.....	Space measure.....	40 cubic feet.
Tonde (cereals).....	Denmark.....	3.94783 bushels.
Tondeland .....	.....do.....	1.36 acres.
Tsubo.....	Japan.....	6 feet square.
Tsun.....	China.....	1.41 inches.
Tunna	Sweden.....	4.5 bushels.
Tunmland.....	.....do.....	1.22 acres.
Vara.....	Argentine Republic.....	34.1208 inches.
Do.....	Castile.....	0.914117 yard.
Do.....	Central America.....	38.874 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Vara.....	Chile and Peru	33.367 inches.
Do.....	Cuba.....	33.384 inches.
Do.....	Curaçao	33.375 inches.
Do.....	Mexico.....	33 inches.
Do.....	Paraguay.....	34 inches.
Do.....	Venezuela.....	33.384 inches.
Vedro.....	Russia.....	2.707 gallons.
Vergees.....	Isle of Jersey.....	71.1 square rods.
Verst.....	Russia.....	0.663 mile.
Vlocka.....	Russian Poland.....	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measure.

Millimeter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measure.

Millimeter ($\frac{1}{1000}$ liter) equals 0.27 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6417 gallons.
Hectoliter (100 liters) equals 26.417 gallons.
Kiloliter (100 liters) equals 264.17 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.

Hectometer (100 meters) equals 328 feet 1 inch.

Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).

Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.

Are (100 square meters) equals 119.6 square yards.

Hectare (10,000 square meters) equals 2.471 acres.

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WAGES IN FOREIGN COUNTRIES.

The following statement, showing the rates of wages in the general trades in various countries, has been prepared in response to requests for such information which have recently been received by the Department of State.

The rates given for foreign countries have been compiled from United States CONSULAR REPORTS, with the exception of the rates in New South Wales, which have been compiled from the Statistical Register of New South Wales for 1891.

In some cases, where no general rates of later date were available, the statistics are taken from a Special Consular Report, entitled Labor in Foreign Countries, printed in 1884. In nearly all the cases, however, the rates for 1884 are supplemented by later statistics, which will be found immediately following the tabular statements. These subsidiary figures will aid in arriving at a close approximation of the present rates of wages prevailing in those countries. They will, also, serve to show that but slight changes in the rates of wages have occurred during the decade, and that the rates for 1884 are substantially the same as those which now prevail in foreign countries, the former being, if anything, higher than the present rates.

It was considered necessary, for comparative purposes, to give a column to the United States, but as there is no Department compilation showing the average wages prevailing in this country, the figures were taken from the report to the United States Senate (Fifty-second Congress, second session), upon transportation, wages, and prices, for fifty-two years, ending July, 1891, in certain localities in Connecticut, Delaware, Illinois, Kentucky, Maryland, Massachusetts, New Hampshire, New York, Pennsylvania, and

Tennessee. The rates for the several trades, as stated in that report, were collated, and the averages are the rates given in this statement. It is deemed necessary to add, however, that as there is no uniformity in the number of times the several trades are mentioned in the reports—the tables being separately printed and in great detail—the rates given can not be called a true average of the rates which prevailed in the States mentioned. For instance, some trades are mentioned once or twice—that is, in one or two reports, representing only as many places (cities)—while others are mentioned in six, ten, or fifteen, or more reports, and while the oft-mentioned trades may be accepted as comparatively true averages, the trades mentioned in only a few reports represent only the districts for which they are given. In the absence of all other statistics, this is the best that could be done in regard to the United States, and the rates, as a rule, should be taken as only comparatively those which prevailed in 1891.

The weekly hours of labor—that is, the actual working hours—in the several countries, as well as can be ascertained from the foregoing sources, are :

COUNTRIES WITH CURRENCIES ON GOLD BASIS.

Australasia—New South Wales, not stated ; New Zealand, 48 hours ; Victoria, 48 hours.

Brazil, 60 hours.

Belgium, 54, 60, 72, and 78 hours, 60 hours being the most general.

Canada, 60 hours.

Denmark (Copenhagen), 60 hours.

France, 60, 66, and 72 hours, 60 hours being the most general.

Germany, 60, 63, 66, and 72 hours, 60 and 66 hours being the most general.

Holland, 60 and 63 hours.

Italy, 60, 66, and 72 hours, 60 hours being the most general.

Spain, 60, 63, and 72 hours, 60 hours being the most general.

Switzerland, 60 and 66 hours, the latter being the most general.

United States, 60 hours.

COUNTRIES WITH CURRENCIES ON SILVER BASIS.

Austria, 60, 66, and 72 hours, the latter being the most general.

China—In Amoy, the general trades labor 60 hours, but in southern China, and generally throughout China, the working hours are from “day-light to dark,” with an hour for the noonday meal, and a few minutes in the forenoon and afternoon for tea and refreshments.

Colombia, 60 to 72 hours.

Ecuador (Guayaquil), 60 hours.

Japan—Consular reports do not give the hours of labor, but it may be assumed that they are somewhat like those prevailing in China.

Mexico, 60 hours.

Persia—From sunrise to sunset. In winter, an hour at noon for eating ; in summer, workmen have two intermissions, first at 11 o'clock for breakfast, and a few minutes in the afternoon for lunch. Generally speaking, there is no labor performed on Fridays.

Russia, 60, 69, and 72 hours, the latter being the most prevalent.

Venezuela, 60 hours.

WAGES IN FOREIGN COUNTRIES.

Average weekly wages paid to the general trades in countries with currencies on gold basis.

Trades and occupations.	Australasia.			Brazil.*	Belgium.	Denmark (Copenhagen).	France.		Germany.	England.	Ireland.	Scotland.	Holland.	Italy.	Spain (Malaga).	Switzerland.	Ontario (Ottawa).	United States.
	New South Wales.	New Zealand.	Victoria.				Paris.	All France.										
	1891.	1889.	1894.	1884.	1884.	1884.	1894.	1894.	1884.	1884.	1884.	1884.	1884.	1884.	1892.	1884.	1884.	1891.
Building trades :																		
Bricklayers	\$16.32	\$16.12	\$14.60	\$7.90	\$4.58	\$7.00	\$7.62	\$5.74	\$4.21	\$7.56	\$7.22	\$7.55	\$4.89	\$4.20	\$3.80	\$5.21	\$18.00	\$21.18
Hod carriers.....	9.20	10.50	9.50	5.00	3.22	4.30	.....	3.13	2.92	4.94	3.48	4.50	3.60	1.70	.....	2.99	8.40	13.38
Masons.....	13.15	15.38	15.30	5.85	5.22	5.36	7.20	5.33	4.67	7.68	7.12	7.10	4.80	3.00	3.30	5.27	13.50	21.00
Tenders.....	9.20	10.50	9.60	3.28	3.09	4.30	.....	3.23	3.15	5.07	3.65	4.70	4.00	1.70	.....	3.50	8.40	9.60
Plasterers.....	15.00	16.00	15.30	8.30	4.66	6.97	11.00	6.34	4.43	7.80	7.12	6.73	4.00	5.04	5.10	5.03	13.50	23.10
Tenders.....	9.20	10.50	9.60	3.28	3.02	3.86	.....	3.22	2.91	5.27	3.53	4.95	4.00	1.70	.....	3.40	8.40	.....
Slaters.....	15.75	.....	15.30	8.25	4.98	.....	9.00	5.65	4.20	7.10	6.85	6.86	4.00	4.20	.....	4.35	.....	21.00
Roofers.....	.....	.....	.....	5.34	4.98	8.00	.....	5.65	4.28	7.35	6.57	7.13	.....	4.20	.....	2.99	13.50	17.30
Tenders.....	.....	.....	.....	3.28	3.28	.....	.....	3.64	2.81	4.24	3.40	5.10	.....	1.70	.....	3.18	8.40	.....
Plumbers.....	13.35	14.60	13.40	7.92	5.46	6.70	.....	6.10	4.25	7.90	7.47	7.00	4.80	3.60	3.25	5.18	13.50	19.00
Assistants.....	9.20	10.50	9.60	3.60	2.93	4.30	.....	3.61	2.72	4.69	3.38	4.10	2.80	1.70	.....	3.36	8.40	.....
Carpenters.....	14.15	14.58	14.60	7.13	4.07	7.00	8.00	6.20	4.11	7.66	6.97	6.91	4.80	4.00	3.90	4.74	11.60	15.25
Gas fitters.....	13.30	.....	13.40	7.02	5.00	5.90	.....	6.07	4.08	7.66	7.47	6.86	5.60	3.40	.....	5.04	13.50	11.90
Bakers.....	12.65	11.65	11.55	5.73	4.28	2.25	7.15	.....	3.50	6.17	6.53	6.51	4.80	4.00	4.50	3.88	10.50	.....
Blacksmiths.....	12.65	14.60	14.60	13.42	5.38	4.82	6.00	5.81	4.00	7.37	7.07	6.56	4.80	2.60	3.90	5.20	10.50	16.02
Strikers.....	9.20	.....	.....	7.65	3.29	4.82	.....	4.72	2.94	5.30	3.79	4.61	3.60	3.40	.....	4.40	7.00	10.32
Bookbinders.....	10.85	.....	16.54	3.58	5.35	4.12	.....	5.75	4.20	6.77	7.22	6.70	4.00	3.80	.....	4.68	10.00	.....
Brickmakers.....	10.48	.....	.....	10.00	4.25	5.00	6.00	5.33	3.98	7.00	6.41	5.97	3.29	5.00	5.40	4.40	8.10	.....
Brewers.....	23.00	.....	11.90	4.56	4.87	3.75	.....	4.43	5.00	6.85	7.30	6.86	6.00	.....	2.70	3.78	15.00	.....
Butchers.....	.....	10.20	13.07	9.08	4.31	4.37	.....	.....	3.32	5.50	6.81	5.95	3.00	.....	3.90	4.66	9.60	.....
Brass founders.....	16.35	.....	16.00	7.06	6.02	4.82	.....	6.54	4.38	7.47	7.34	6.31	4.00	4.00	.....	4.92	.....	.....
Cabinetmakers.....	12.25	.....	12.20	5.01	5.00	4.58	8.10	6.14	4.25	7.68	7.22	6.73	4.80	3.40	5.25	5.59	11.40	13.32
Confectioners.....	33.40	.....	9.75	7.86	5.03	.....	12.00	4.85	3.40	6.84	.....	6.46	4.80	3.75	3.55	5.84	11.00	.....
Cigar makers.....	11.45	.....	7.30	7.00	6.28	5.00	6.90	4.65	3.63	6.07	.....	6.11	4.80	3.00	4.80	3.30	9.00	.....
Coopers.....	12.90	14.58	13.86	6.45	5.17	4.82	5.22	5.58	3.97	7.50	6.81	6.66	4.80	2.60	.....	4.78	9.00	16.08
Cutlers.....	9.75	.....	.....	.....	5.28	6.70	.....	5.16	3.90	7.00	8.03	6.73	.....	3.80	4.50	4.93	.....	.....

WAGES IN FOREIGN COUNTRIES.

Distillers.....	.....	.....	9.75	10.48	5.00	3.90	6.96	.....	3.56	.....	6.00	6.11	6.00	4.20	4.25	4.02	.....	.....
Draymen and team- sters.....	9.25	.....	10.94	3.54	3.77	3.22	7.92	5.57	2.96	5.37	4.26	5.28	4.40	1.50	.....	.....	8.40	10.80
Drivers:																		
Cab and carriage..	9.25	.....	.....	3.86	3.92	4.80	.....	4.82	3.21	5.15	4.26	5.16	2.50	2.60	2.70	.....	8.40	.....
Street car.....	12.00	.....	.....	6.89	4.09	3.30	.....	4.47	3.44	.....	4.26	5.16	2.50	3.60	3.00	3.84	10.00	.....
Dyers.....	12.00	.....	.....	5.37	6.15	4.30	5.40	4.88	3.45	6.18	4.86	6.08	3.60	3.00	3.30	4.91	7.00	9.00
Engineers.....	13.50	12.20	.....	.....	6.45	8.00	.....	7.35	5.12	8.38	8.27	8.46	8.00	6.00	7.65	6.25	15.00	.....
Furriers.....	12.15	.....	.....	.....	6.35	5.36	8.15	7.00	4.20	8.52	8.03	7.06	4.00	4.60	3.00	4.63	14.00	.....
Gardeners.....	.....	.....	.....	4.30	3.91	4.00	.....	5.11	3.78	5.80	4.86	4.98	3.60	4.00	4.95	3.83	8.00	13.50
Hatters.....	13.83	.....	.....	10.32	4.59	4.00	.....	5.50	4.36	6.10	7.30	7.88	4.00	5.25	.....	3.84	.....	.....
Horseshoers .....	.....	.....	.....	7.02	5.63	4.12	7.80	5.89	3.61	6.32	6.21	6.88	4.40	5.20	4.50	4.65	12.00	.....
Jewelers.....	22.80	16.15	13.10	12.00	6.84	5.36	10.36	6.24	5.21	8.76	8.00	7.00	3.20	5.20	3.60	6.35	12.00	.....
Laborers, porters, etc..	9.20	9.50	9.60	3.35	3.77	4.30	5.00	4.00	3.11	4.70	4.00	4.36	4.80	3.80	2.75	3.63	7.00	8.88
Lithographers.....	13.35	.....	13.40	12.90	5.86	5.50	12.00	7.17	5.60	7.07	7.71	7.33	4.80	.....	3.00	5.51	12.00	.....
Millwrights	15.00	14.60	.....	15.00	5.00	5.87	7.00	6.74	4.18	6.97	7.30	6.76	6.00	.....	.....	6.30	12.00	16.80
Nail makers, hand....	6.70	.....	.....	.....	.....	4.83	.....	4.84	3.12	5.90	4.87	.....	.....	3.20	.....	2.64	.....	.....
Printers.....	14.10	14.58	.....	12.00	4.86	5.36	8.22	6.64	.....	7.17	8.52	7.27	6.00	4.60	4.50	5.92	.....	16.42
Potters	14.55	.....	.....	3.87	4.88	4.02	6.35	4.78	3.60	5.20	4.38	6.62	.....	5.20	4.00	4.17	.....	.....
Sailmakers	10.85	.....	.....	10.32	4.56	4.82	.....	6.04	2.85	7.02	8.03	6.50	4.80	2.80	3.90	.....	.....	.....
Shoemakers.....	9.80	11.68	.....	.....	4.82	3.50	6.00	.....	3.00	.....	.....	.....	4.00	.....	3.30	.....	.....	.....
Stevedores.....	14.50	.....	17.52	7.75	4.36	5.00	.....	6.72	5.70	8.84	5.40	5.07	.....	2.00	3.30	.....	.....	.....
Stonecutters.....	12.60	.....	.....	.....	.....	.....	8.00	5.18	4.85	.....	.....	.....	.....	.....	3.90	.....	.....	21.00
Tanners.....	10.50	.....	9.24	.....	5.81	5.00	.....	.....	3.80	6.35	5.45	6.46	4.00	2.20	4.20	4.92	8.25	.....
Tailors	11.90	12.36	13.40	6.36	5.58	.....	.....	5.62	3.41	7.40	6.70	6.90	5.00	4.00	4.90	6.36	9.00	.....
Telegraph operators...	.....	.....	.....	10.75	6.35	5.30	.....	6.92	5.11	11.00	8.87	12.00	5.00	5.20	7.00	.....	7.50	.....
Tinsmiths.....	10.00	.....	12.40	7.02	4.40	.....	7.00	5.50	3.55	6.50	6.04	6.67	4.00	6.60	3.00	4.40	6.00	14.35

* The gold standard prevails in Brazil, but the actual currency is paper, which is now valued at about 28 cents per milreis, while the gold milreis is worth 54.6 cents. As the rates given are based upon a gold standard, and as it is now most likely that labor is paid in paper currency, it follows that the purchasing power of the paper-currency wage is only about one-third the purchasing power of the rates given in the table, and that labor has suffered to that extent, unless wages have been trebled in the meantime.

Austria-Hungary and Russia have been omitted from the fixed-currency table for the reason that while a gold basis has been recently adopted in the former and is being gradually established in the latter, they were on a silver basis at the time the rates of wages given were in force. They are, therefore, included in the table of countries having a fluctuating currency, with explanatory notes as to the present condition of their finances.

The following supplementary statements give such later information as was obtainable concerning the rates of wages in gold-standard countries:

Germany, 1889.—Annual wages earned in the various industries in 1889: Building trades (not otherwise designated), \$124; potters, \$157; machine shops and iron and steel works, \$200; gas works and waterworks, \$194; chemical industries, \$188; leather industries, \$187; paper mills, \$162; potteries, \$158; glassworks, \$155; silk mills, \$146; textile industries, \$123; rolling mills, \$238; quarries, \$63. (CONSULAR REPORTS No. 148, p. 97.)

Germany, 1890.—The British consul at Munich, July 9, 1890, reports: In the country, the price of skilled labor is lowest in the textile industries, and highest in parquetry and in stove and glue factories, etc.—male skilled labor, 48 cents to \$1.20; ordinary male labor, 42 to 66 cents; female skilled labor, 34 to 72 cents; ordinary female labor, 26 to 34 cents. Men's average wages in the industries—Textile, 72 cents; iron industries, \$1.28. Printers in Munich, 82 cents; ordinary labor in Munich, 54 to 66 cents; ordinary labor in the country, 48 cents. Wages of skilled female labor in Munich, under 72 cents.

Germany, 1892.—A Berlin machine maker, by constant work, earns \$250.60 per annum; a Berlin bricklayer or carpenter, less the rainy and frosty days, earns \$253 per annum; an Erlanger first workman in a stone quarry, \$232.53; ordinary workman, \$187.95. (CONSULAR REPORTS No. 145, p. 302.)

Germany, 1894.—Weekly wages in shipyards in the Hamburg district: Pattern makers, \$5.70; machinists, \$5.64; boiler makers, \$5.45; plumbers and pipe fitters, \$5.40; carpenters, \$5.20; riveters, \$5; furnace men, \$4.56; sheet-iron workers, \$4.50; coppersmiths, \$6; molders, \$5.50; laborers, \$4.32. (CONSULAR REPORTS No. 170, p. 293.)

England, 1891.—Street-car drivers, \$5.82 per week.

England, 1892.—Telegraph service, Government operators: Men, first class, \$9.73 per week; second class, \$2.92, \$3.40, and \$4.38 per week for first, second, and third years, respectively. Women, first class, \$6.80 per week; second class, \$2.43, \$2.92, and \$3.65 per week for first, second, and third years, respectively. The second-class operators are as two to one as compared with the first-class. The number of women employed as operators is one-third of the total force. Midland Railway operators are paid from \$97.33 for first year, to \$389.32 for the tenth year, the increase taking place year after year, higher salaries being dealt with according to the special circumstances of each case. Great Western Railway operators are paid

from \$340.65 to \$729 per annum. Lancashire and Yorkshire Railway operators are paid \$4.86 to \$6.32 per week. (CONSULAR REPORTS No. 144, p. 47.)

England, 1894.—Weekly wages in Liverpool shipyards: Pattern makers, \$8.51; machinists, \$8; boiler makers, \$8.63; pipe fitters, \$8.51; carpenters, \$9.11; drillers, \$6.30; joiners, \$8.51; fitters, \$5.59; riveters, \$7.90; calkers, \$7.90; painters, \$8; smiths, \$9.36; laborers, \$4.86. (CONSULAR REPORTS No. 170, p. 302.)

Ireland, 1894.—Weekly wages paid in Belfast shipyards: Platers, \$8.26; helpers, \$3.89; riveters and calkers, \$7.53; drillers, \$3.77; joiners, \$8; smiths, \$7.78; finishers, \$7.05; bolt makers, \$7.90; strikers, \$4.74; pattern makers, \$8; fitters, \$7.78; shipwrights, \$8.14; laborers, \$3.77; riggers and sawyers, \$7.17; sailmakers, \$6.96; plumbers, \$8.75; assistants, \$2.67; polishers, \$7.30; upholsterers, \$8.26. (CONSULAR REPORTS, No. 170, p. 304.)

Scotland, 1894.—Weekly wages in the Clyde shipyards: Pattern makers, \$9.35; machinists, \$6.48; boiler makers and plumbers, \$8.64; pipe fitters, \$7.29; shipwrights, \$8.10; joiners, \$7.84; drillers, \$9.18; riveters, \$10.80; calkers, \$9.72; painters, \$8.10; furnace men, \$6.48; sheet-iron workers, \$7.02; coppersmiths, \$8.37; iron molders, \$8.10; brass molders, \$6.60; blacksmiths, \$8.10; laborers, \$5.40; frame setters, \$9.18. (CONSULAR REPORTS, No. 170, p. 307.)

Holland, 1892.—Any statement respecting the earnings of the various laborers can only be approximative, on account of the great difference and fluctuations in both hours of labor and wages. One witness stated that a good workman (on the docks) at Rotterdam ought easily to make \$4 to \$4.80 per week the year round, but the rate of wages per hour may be put at from 8 to 10 cents. Laborers employed on railways and at the depots average from 36 to 70 cents per day, with a bonus of from \$1.25 to \$1.60 per month. Drivers on tramway cars receive from \$4.05 to \$5.68 per week, and conductors \$5.25. Smiths and other workmen employed in the carriage factories of the tramway companies earn \$6.08 per week. Engine drivers on steam tramways earn from \$4.86 to \$6.85 per week, besides a bonus. These, at first sight, may appear substantial earnings, but it must be borne in mind that in this country the purchasing price of the florin (40.2 cents) scarcely exceeds that of a shilling (24 cents) in England. (British consular reports.)

Holland, 1894.—Weekly wages in shipyards: Pattern and boiler makers, \$6.24; machinists, \$6.72; plumbers and pipe fitters, \$5.28; carpenters and painters, \$4.80; joiners, calkers, furnace men, and molders, \$6; drillers, \$4.88; fitters-up and riveters, \$7; sheet-iron workers, \$5.08; coppersmiths, \$5.64; laborers, \$4.20. (CONSULAR REPORTS, No. 170, p. 300.)

Italy, 1889.—Per diem wages in Florence: Machine and molding shops—cabinetmakers, 48 to 68 cents; wood carvers, 39 to 68 cents; carpenters, 48 to 59 cents; carriage builders, ordinary hands, 58 cents, first-

class hands, 96 to \$1.15. Pottery and porcelain works—painters, 10 cents to \$1.15; turners, 58 to 96 cents; firemen, 23 to 49 cents; laborers, 28 to 49 cents; potters, 58 to 68 cents. Glassworks—blowers, 96 cents to \$2.30; cutters, 58 to 96 cents; mechanics, 58 to 76 cents; laborers, 20 to 76 cents; founders, 48 cents to \$1.15. Goldsmiths and jewelers, 49 to 96 cents. Paper mills—machine tenders, 39 to 49 cents; ordinary hands, 29 to 45 cents. Printers, 58 to 96 cents; lithographers, ordinary hands, 34 to 69 cents; skilled hands, 59 to 78 cents. (British consular reports.)

Italy, 1890.—Weekly wages in Genoa: Carpenters, \$3.60 to \$6 for first-class hands and \$3 to \$3.60 for second class; masons, \$3 to \$3.60; plasterers, \$3 to \$4.25; stonecutters, \$3 to \$3.60; house painters, \$2.40 to \$3; blacksmiths, \$2 to \$4.80; tailors, \$2.40 to \$4.20; shoemakers, \$1.80 to \$2.40; hatters, \$2.40 to \$4.80; machinists, \$3.60 to \$6; fitters, \$3 to \$6.90; ship carpenters, \$6. Stevedores throughout Italy, \$7.44, about the highest wages earned in the general trades and callings. (CONSULAR REPORTS, No. 120, p. 97.)

Italy, 1890.—Per diem wages in Florence and vicinity: Foundries and machine shops—molders, 49 to 96 cents; turners and planing machine hands, 59 to 86 cents; carpenters (model makers), 73 cents to \$1.05; fitters, 39 to 96 cents; blacksmiths, 69 cents to \$1.05; blacksmiths' helpers, 39 to 45 cents. Brass founders, 49 to 69 cents; cutters, 78 cents. (British consular reports.)

Italy, 1890.—Per diem wages in Sicily: Laborers, 24 to 28 cents; masons, 44 to 52 cents; masons' helpers, 32 to 40 cents. (British consular reports.)

Italy, 1893.—Miners, 40 to 72 cents per day; bricklayers and masons, 66 cents; blacksmiths, 64 cents; laborers, 32 cents, and car men, 48 cents. (British consular reports.)

Italy, 1894.—Weekly wages in shipyards in Genoa: Pattern makers, 70 per cent receive \$3.60 and 30 per cent \$6; machinists, 80 per cent receive \$3.60 and 20 per cent \$7.20; boiler makers, 80 per cent receive \$3 and 20 per cent \$6; smiths, 80 per cent receive \$3.60 and 20 per cent \$7.20; carpenters, 50 per cent receive \$3.60 and 50 per cent \$5.40; fitters-up, 50 per cent receive \$3.60 and 50 per cent \$6; molders, 50 per cent receive \$3.60 and 50 per cent \$7.20; laborers, 50 per cent receive \$2.40 and 50 per cent \$3. (CONSULAR REPORTS No. 170, p. 298.)

Switzerland, 1892.—The Swiss workingman is satisfied with a rate of remuneration which is 33 to 40 per cent below that of the English and 10 to 15 per cent below that of the French workingman, the rates varying in different parts, being higher in the French than in the German cantons. Swiss official estimates of the average wage of a Swiss male worker fixes it at 50 to 60 cents per diem, but the consul considers this estimate too low. Noncontract laborers earn from 48 to 72 cents. (British consular reports.)

Switzerland, 1895.—The following figures are taken from a report by Consul Germain, of Zurich, dated July 11, 1895: The average wages paid

in cotton mills vary between 29 and 50 cents per diem. A day's wage of 80 cents for ordinary factory hands is an exception. Among the reelers the wages are lowest, one-eighth of these receiving not more than 20 cents per day. Silk mills: Dyers and finishers, 30 per cent receive less than 30 cents and only 15 per cent receive over 40 cents; winders and twistors, 40 to 50 cents; spinners, 33 to 35 cents; warpers, 50 to 60 cents; weavers, 40 to 60 cents—all per diem. Iron foundries and machine works: Unskilled laborers (20 per cent of the whole), 60 cents; skilled workers (57 per cent of the whole), 50 cents to \$1; and the remaining skilled workers (23 per cent of the whole), \$1 to \$2—per diem.

WAGES IN FOREIGN COUNTRIES.

Average weekly wages paid to the general trades in countries with currencies on silver basis.

General trades and occupations.	Austria.*		China.		Ecuador.		Pesia.	Peru. (Callao).	Russia	Venezuela.
	Bohemia †	Austria.	Amoy.	Ningti	ito.	Gu qu	1884.	1884.	1884.	1884.
	1891.	1884.	1891.	1884	18.					
Building trades:						\$				
Bricklayers.....		\$3.58	\$1.64	\$1.	1.44		\$2.40	\$9.00	\$4.32	\$9.00
Hod carriers.....		2.05	1.13		.72		1.90	5.40	8.45	4.63
Masons.....	\$2.63	3.73	1.60		1.44		1.80	14.76	6.72	9.74
Tenders.....		1.92	.75		.72	1.14	1.20	4.90	2.88	3.81
Plasterers.....		4.00	1.90		1.44	1.56	2.40	9.00	4.00	9.40
Tenders.....		1.82	.75		.72		1.20	5.40	2.55	4.63
Slaters.....		4.00			1.44				4.90	13.20
Roofers.....		4.20	1.60		1.44	1.80	1.80		3.75	8.70
Tenders.....		2.80	.75		.72		1.20		2.60	4.82
Plumbers.....		4.11	1.56		1.44				4.32	
Assistants.....		9.42	.75		.72				2.30	9.60
Carpenters.....	2.85	5.10	2.15		1.44	1.56	2.40	9.00	3.30	9.84
Gas fitters.....		6.00			1.44				3.70	18.00
Bakers.....		4.72	2.80		1.44		3.72	3.60	2.92	12.00
Blacksmiths.....	2.57	3.18	1.25	1	1.44	1.85	3.04	16.30	3.72	12.83
Bookbinders.....		4.00			1.44			13.80	3.48	10.25
Brickmakers.....	2.24	3.10	1.64	1	1.44		3.78	9.20	2.80	9.16
Brewers.....	3.09	5.87	3.30					20.00	4.00	
Butchers.....		3.60	2.25		1.44		1.68	12.30	2.91	11.75
Brass founders.....	3.31	4.40	1.62		1.44	3.00			4.20	
Cabinetmakers.....	2.85	3.00	2.25	1.80	1.44			14.76	5.76	14.45
Confectioners.....	3.20	3.04	2.80	1.32	1.44		2.88	4.20	3.30	10.38
Cigar makers.....		3.04	1.40		1.44		1.68	7.50	5.00	12.50
Coopers.....		3.90	1.63	1.80	1.44			7.50	3.66	
Cutters.....	2.20	3.00	2.13						3.91	
Drummers.....	2.36	3.00	3.30				1.85		4.00	13.50
Drymen and teamsters.....		2.20			.72		3.60	3.50	3.60	

WAGES IN FOREIGN COUNTRIES.

Drivers:									
Cart and carriage.....	.....	4.00	.....	.....	.....	3.84	.....	.....	.....
Street car.....	.....	3.68	.....	.....	.....	4.84	.....	.....	.....
Dyers.....	2.42	3.80	.....	2.00	.....	.....	1.44	.....	.....
Engravers.....	.....	.....	.....	.....	.....	.....	1.44	.....	.....
Furriers.....	.....	3.67	.....	.....	.....	.....	.....	.....	.....
Gardeners.....	.....	.....	.....	.....	.....	3.84	.....	.....	.....
Hatters.....	.....	3.85	.....	.....	.....	3.84	1.44	.....	.....
Horseshoers.....	.....	3.48	.....	.....	.....	9.66	1.44	.....	.....
Jewelers.....	.....	4.74	.....	1.98	.....	9.66	.....	.....	.....
Laborers, porters, etc.....	2.37	3.00	.....	1.20	.....	3.84	.72	.....	.....
Millwrights.....	.....	3.10	.....	.....	.....	.....	.....	.....	.....
Potters.....	2.80	4.85	.....	1.44	.....	4.84	1.44	.....	.....
Printers.....	3.34	3.40	.....	.....	.....	4.84	1.44	.....	.....
Sailmakers.....	.....	3.80	.....	.....	.....	.....	.....	.....	.....
Shoemakers.....	.....	.....	.....	.....	.....	.....	1.44	.....	.....
Stevedores.....	.....	7.40	.....	.....	.....	5.92	.....	.....	.....
Stonecutters.....	.....	4.15	.....	.....	.....	.....	1.44	.....	.....
Tanners.....	2.41	3.00	.....	.....	.....	5.92	1.44	.....	.....
Tailors.....	.....	4.03	.....	.....	.....	4.84	1.44	.....	.....
Telegraph operators.....	.....	6.75	.....	.....	.....	12.00	.....	.....	.....
Tinsmiths.....	.....	3.70	.....	.....	.....	5.92	1.44	.....	.....

* Although the gold standard now prevails in Austria-Hungary, the silver standard prevailed up to August, 1892. As will be noted in the tables printed in CONSULAR REPORTS showing the value of foreign coins, the Austrian silver florin, the old money unit of the Empire, fluctuated in value from 47.6 cents in July, 1892, when it was superseded by the gold crown, with a fixed value of 20.3 cents. The downward course of the old silver florin must be taken into account in the Austrian wage rate, thus scaling still further the very low rate which prevailed in that country.

† A week of seven days.

It Tailors employed on native clothes.

Employed in making foreign clothes.

Austria, 1889.—From a British consular report dealing with labor in the several districts of Austria-Hungary, the following daily wage rates are taken: Budapest—Factory hands, 10 cents (lowest) to \$1.05 (highest); women factory hands, 8 to 40 cents; boiler makers, 80 cents; wheelwrights, 90 cents; tinsmiths, 70 cents; coppersmiths, 84 cents; turners, 80 cents; machinists, 66 cents; locksmiths, 76 cents; instrument makers, 88 cents; carriage builders, 68 cents; woodworkers, 83 cents; saddlers and upholsterers, 81 cents; painters, 69 cents; molders, 65 cents; day workmen, 50 cents; other laborers, 46 cents; iron miners, 32 to 40 cents. Various districts—chemical factories, 24 to 92 cents; flour mills and sugar factories, 20 to 80 cents; tobacco factories, 24 to 40 cents; distilleries, 20 to 72 cents; glass factories, 32 to 40 cents; ironworks, 20 to 80 cents; sawmills, 16 to 60 cents; foundries, 40 to 92 cents; forges, machine shops, and rolling mills, 40 to 96 cents; nail factories, 20 to 24 cents; women, 16 to 18 cents; day laborers, 20 to 30 cents.

Austria, 1894.—Weekly wages (60 hours) in the Trieste shipyards: Pattern makers, \$4.20 to \$7.80; boiler makers, plumbers, pipe fitters, coppersmiths, and molders, \$3.60 to \$5.40; carpenters, joiners, drillers, fitters-up, riveters, calkers, painters, and furnace men, \$3 to \$4.50; iron and brass workers, \$2.40 to \$3 (CONSULAR REPORTS No. 170, p. 290). Weekly wages in hemp mills in the Budapest district: Laborers, \$2.50; breakers, \$3.50; hacklers, \$4.14 (CONSULAR REPORTS No. 168, p. 140).

Mexico, 1885.—Mining—in the San Antonio mine (near Monterey), Mexican labor under an American superintendent speaking Spanish, work two shifts of twelve hours each. Good smelters are paid \$1 per day of twelve hours; assistant smelters, 75 cents; and yard hands, 36 to 50 cents (CONSULAR REPORTS No. 67, p. 491). La Paz mines—wages per day of twelve hours: Miners, \$1.50; furnace men, \$1; general workmen, \$1.25; teamsters, 75 cents; machinists, \$2.50; carpenters, \$2; watchmen, 75 cents (CONSULAR REPORTS No. 67, p. 504).

Mexico, 1895.—In an article in Rhodes' Journal of Banking, for July, 1895, Mr. Worthington C. Ford, Chief of the United States Treasury Bureau of Statistics, quotes a statement from Mr. C. A. Browne, treasurer of the Mexican Central Railway, as to the wages paid by that company. Mr. Browne writes:

In the first part of 1890, we were paying Mexican laborers from 50 to 75 cents per day, according to the location upon the road; brakemen, from \$45 to \$50 a month; machinists, from \$1 to \$5 a day; masons, from \$1 to \$3; and carpenters, \$1 to \$3. At the present time, laborers are receiving the same rates; carpenters, from \$1.50 to \$3.50 per day, and some as high as \$4.75; machinists, from \$1 to \$5 a day, according to their skill.

Russia.—While silver is the nominal currency of Russia, paper is the actual currency in which all general business and other commercial values are estimated throughout the Empire. Consul-General Karel, of St. Petersburg, in a report upon this subject, printed elsewhere in this number, says: "The paper ruble—officially called 'credit ruble'—is the actual currency of

Russia." Silver being very little in circulation, plays only a small part in Russian currency.

Gold is the standard by which the values of both the paper and silver ruble are determined. The consul-general says that, at the date of his writing (July 16, 1895), the silver ruble passed at par with the paper ruble, which was then quoted at 52.1 cents American. According to the United States Treasury valuations, the silver ruble on that date was valued at only 38.9 cents. The Russian gold ruble has a fixed value of 77.2 cents. In 1884, the date on which the foregoing Russian wage rates were obtained, the silver ruble was valued by the United States Treasury at 64.5 cents; on July 1, 1895, at 38.9 cents.

According to the Statesman's Year Book for 1895, the outstanding paper currency on January 1, 1892, amounted to 1,122,295,384 rubles, covered by 286,505,032 rubles in gold and silver, leaving uncovered 568,527,206 paper rubles. It may be well to add to this statement from the Year Book, to make it clearer to the general reader, that the 286,505,032 gold and silver rubles were estimated on that date as equal to 553,768,178 paper rubles, thus leaving 568,527,206 paper rubles uncovered.

Under date of July 25, 1895, Consul-General Karel transmitted a report, which is printed elsewhere in this number of CONSULAR REPORTS, upon the regulations issued by the Russian Government Bank, under which the bank will issue certificates of deposit payable in gold, etc.

RUSSIAN IRON ORE AND IRON INDUSTRIES.

The iron industry is one of the most important elements of the industrial progress of a country. We have countries on the one hand which have advanced in culture and learned the value of industrial development, although nature did not bless them with extensive riches of iron ore. These countries are exploring the earth from one end to another of their territory for iron deposits, and, when found, they know their value and put every bit of them into use. On the other hand, we have countries that have an abundance of iron ore deposits, but do not pay much attention to them and are dilatory in their development. This can be truly said of Russia. She has inexhaustible deposits of the very best iron ore, and also fuel, which may be called the motive power of the iron industry, and yet in the production of iron Russia is behind even France, which is not rich in iron ore. Still, it should not be assumed that Russia makes no progress in this important branch of industry. It is, however, very slow. During the last ten years, her production of pig iron has been tripled, but it is a trifling quantity in relation to the extensiveness of her iron deposits. How far she is behind, and how much she must hasten in order to catch up with the other iron-producing countries, may be seen below. In 1894, the following quantities of pig iron were produced by the respective countries named, to wit: England, 8,251,592 tons; United States, 7,457,128 tons; Germany,

6,301,544 tons; France, 2,293,112 tons; and Russia, 1,498,648 tons. From these figures, it may be seen that England produced five and one-half times as much as Russia, though England is far from being as rich in iron ore as Russia. The United States produced nearly five times as much, and Germany four times. The United States commenced their iron industry but a comparatively short time ago, and its development should serve as an instructive example to Russia. The United States, a young industrial country, has nearly caught up with old England in that respect, and there is no doubt that before long it will overtake England. Russia sees this and says, "Why should that which is possible for America be impossible for us? We must work and work energetically, and not in a slow and careless manner."

In the Urals, where more iron ore is produced than in any other Russian region, many beds of iron deposits are not worked, and yet the Ural deposits of red hematite deserve special mention. The ore occurs in strata of the carboniferous formation, and yields as much as 64 per cent of iron in smelting; in the same country, forests are in abundance, but are wasted by being burned down instead of being used or saved for fuel for iron industries. The manufacture of pig iron is carried on there mainly by charcoal fuel, which is either prepared in stoves or in stacks, and chiefly from pine and birch wood, with which the country is well supplied.

South Russia is also rich in mineral fuel, but, so far, has been very little explored as to iron ore except on the borders of the governments of Kherson and Katerinoslav, where, not far from the village of Krivoi-Rog, vast deposits of exceedingly pure and rich ores, with 60 to 68 per cent of iron, chiefly specular iron, magnetic iron ore, and red hematite, have been discovered.

The statistics showing the total yearly yield of iron ore in Russia are available so far only up to January 1, 1892. In 1890, there were in the whole Russian Empire 536 iron ore mines and 195 lakes, which yielded 1,979,335 tons of iron ore; in 1891, there were 683 mines and 202 lakes, which yielded 2,158,771 tons of iron ore. The following shows the total production of pig iron in the Empire during the last five years: In 1890, 1,021,244 tons; 1891, 1,107,550 tons; 1892, 1,134,170 tons; 1893, 1,248,970 tons; 1894, 1,498,648 tons.

The duty on iron in Russia is of two kinds—the "raised" tariff (charged on iron from the countries with which Russia has no agreement), and the conventional tariff (charged on iron from countries with which Russia has an agreement)—and is as follows: The "raised" tariff on iron in bars, puddling iron, iron in powder, and iron rails, is 72 copecks (gold) per pood (36.112 pounds), or 42.62 rubles (\$32.91) per ton. The conventional tariff is 50 copecks (gold) per pood, or 27.71 rubles (\$21.39) per ton. The "raised" tariff on sheet iron, including No. 25 of the Birmingham caliber, is 1.02 rubles (gold) per pood, or 56.48 rubles (\$43.60) per ton. The conventional tariff is 65 copecks per pood, or 36 rubles (\$27.79) per ton. The "raised"

tariff on sheet iron above No. 25 of the Birmingham caliber is 1.20 rubles in gold per pood, or 62.05 rubles (\$47.90) per ton. The conventional tariff is 80 copecks per pood, or 44.30 rubles (\$34.20) per ton.

Russia, thus far, has neglected the riches which nature has given her, and acts as a people for whom iron is not an article of first necessity but of luxury. Here, it would seem, are rich fields for enterprise and industry and a profitable opening for capital.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *June 12, 1895.*

OUTLOOK FOR CEREALS IN RUSSIA.

The reports from the farming districts of Russia as to the condition of cereals and grasses up to the middle of June last, show that the meteorological conditions of the latter part of spring and the beginning of summer differed very little between the chernoziom* and nonchernoziom governments. Warm, dry, and windy weather set in at the end of April and continued during the first half of May in the greater part of the nonchernoziom region. The temperature fell considerably in the middle of May and unusually cold weather set in, which continued until near the end of the month. During this cold weather very little rain fell, and it was of little profit to vegetation.

At the end of May, warm weather set in, increasing in June, and, at the same time, quite general rains fell, which pushed the growth of vegetation. The sowing of spring cereals was begun in most of the nonchernoziom governments later than usual on account of the unfavorable condition of the spring weather; the dry and cold weather retarded growth except for the grain which was sown at the end of May and the beginning of June, which was under more favorable conditions.

Winter rye began to ear in the greater part of the nonchernoziom region at the beginning of June; in the north and northeast, in the middle of June. The drought and cold weather in May retarded the growth of winter sowings, and, notwithstanding the warm and moist weather which set in in June, the condition of the winter cereals in the greater part of the nonchernoziom region was as unsatisfactory in the middle of June as in the middle of May, and in some parts it began to get worse. This was especially the case in the eastern part of the nonchernoziom governments where the cold weather, and especially the light frosts in May, not only hindered the growth of the winter sowings but in some parts, mainly in the northeast, damaged it. A small improvement in the winter sowings was observed only in the Vistula and partly in the Baltic and Lithuanian governments, in which the winter cereals, on account of the warm weather and rain during the first part of

* A fertile black-earth region of some 100,000,000 acres, extending from the Carpathian to the Ural Mountains.

May, increased in strength. In the following districts the late winter sowing is reported unsatisfactory: The greater part of the Lithuanian government, all the White Russia governments, the lake governments (except that of Olonetz and the northern parts of the St. Petersburg and Novgorod governments), all the manufacturing governments (except the eastern part of Kostroma), the northern districts of Iver, and the southern parts of the Moscow, Vladimir, and Kaluga governments; but a more or less satisfactory harvest is expected in the same districts where the winter grain was sown either very early or in well fertilized land.

But, in general, the winter wheat was everywhere better than the rye, although in some parts the wheat sown later was full of weeds.

The spring grain, on account of its late sowing and the unfavorable condition of the weather in May, was much retarded in its growth and began its progress only in June, when warm weather set in. In the governments of Fistula, Lithuania, and in parts of the Baltic and in White Russia, a favorable condition of the spring cereals may be observed, which promises a good harvest. In all the other parts of the nonchernoziom region the grain, especially that sown only in spring, is so behindhand that its growth depends wholly on the future conditions of the weather.

Judging by their exterior aspect, the spring cereals are in a satisfactory condition in the Ural and northern governments. In the other localities the condition was considered middling, with a prospect of becoming better. The general defect of this year's spring grain is that it has been smothered by bad weeds. Owing to the cold spring, there appeared very few of the noxious insects; the cereals were somewhat damaged only by the Hessian fly and the earth flea. The area under spring cereals has considerably increased in the nonchernoziom region, in consequence, mainly, of the resowing of the winter grain which had perished, and, further, in consequence of the winter fields which were left unsown in autumn on account of the bad weather, and consequently were sown in the spring.

The greatest increase of the area under spring sowings is observed in the Lithuanian, White Russian, and the lake governments, where it amounts to from 25 to 40 per cent of the whole winter fields; next, come the industrial governments. The smallest resowing took place in the Baltic, northern, and Ural governments, with the exception of the southeastern part of the Perm government, where the greater part of the winter crops have perished and the fields have been resown with spring grain. The peasants who had not a sufficient amount of spring seeds were supplied by the zemstvos.

The growth of the grasses was retarded everywhere by the cold and dry weather in May; they began to grow only after the rain set in. Should favorable weather continue, the hay crop will be satisfactory. In the Caucasus country, the weather during two-thirds of May was cool and rainy; from the 20th the temperature rose and the rain ceased for some time, but in June rain began again and kept on until the middle of the month, and, in spells, was very heavy. The condition of the winter as well as the spring

crops was very good in the middle of June, but on account of the abundant rain the grain, especially in the Transcaucasus, suffered considerably. The harvest began early in June; a good deal of hay was cut, but the rain hindered its curing.

ST. PETERSBURG, *July 24, 1895.*

JOHN KAREL,
Consul-General.

RUSSIAN COMMERCE IN 1895.

The following statement shows the aggregate amount of foreign trade transacted by Russia—*i. e.*, her exports and imports—over the European frontiers, including the Black Sea, during the first four months (with April separately) in 1895, compared for the same periods with the two previous years:

Description.	From January 1 to May 1—			April—		
	1893.	1894.	1895.	1893.	1894.	1895.
	<i>Rubles.*</i>	<i>Rubles.*</i>	<i>Rubles.*</i>	<i>Rubles.*</i>	<i>Rubles.*</i>	<i>Rubles.*</i>
Exports.....	120,201,000	193,402,000	180,526,000	36,382,000	50,160,000	60,130,000
Imports.....	96,514,000	122,060,000	114,545,000	33,984,000	40,449,000	36,188,000
Exports over im- ports.....	23,687,000	71,342,000	65,981,000	2,398,000	9,711,000	23,942,000

* The consul-general does not state whether the ruble is the silver or paper ruble; consequently, it is impossible to reduce the amounts to United States currency. The values of the silver ruble at different periods will be found in "Values of Foreign Coins," on preliminary pages of this number.

The following table shows the amount of imports and exports of the principal articles in groups during the first four months of 1895, as compared with the same period of 1894:

Description.	April—		January 1 to May 1—	
	1894.	1895.	1894.	1895.
<i>Exports.</i>	<i>Rubles.</i>	<i>Rubles.</i>	<i>Rubles.</i>	<i>Rubles.</i>
Breadstuffs.....	33,617,000	38,585,000	126,647,000	104,190,000
Raw and half-worked materials.....	13,580,000	17,795,000	58,393,000	65,261,000
Animals.....	797,000	1,259,000	2,850,000	4,295,000
Manufactures	2,166,000	2,491,000	5,512,000	6,780,000
Total.....	50,160,000	60,130,000	193,402,000	180,526,000
Gold and silver.....	2,000	8,000	9,000	22,000
<i>Imports.</i>				
Breadstuffs.....	3,312,000	3,225,000	12,727,000	11,118,000
Raw and half-worked materials.....	24,793,000	21,522,000	77,460,000	66,692,000
Animals.....	86,000	149,000	485,000	1,106,000
Manufactures	11,258,000	11,292,000	31,388,000	35,629,000
Total.....	39,449,000	36,188,000	122,060,000	114,545,000
Gold and silver.....	5,792,000	797,000	38,690,000	4,574,000

According to the report of the department of customs, the principal articles and the quantities exported from Russia from January 1 to May 1, 1895, as compared with the same period of 1894, were :

Articles.	1894.	1895.
Wheat.....bushels...	29,015,992	33,620,272
Rye.....do.....	9,566,456	11,482,326
Oats.....do.....	49,204,857	22,548,559
Barley.....do.....	28,615,751	21,279,017
Maize.....do.....	8,304,470	5,087,278
Seeds :		
Flax.....do.....	771,071	1,082,070
Hemp.....do.....	122,288	68,120
Rape and mustard.....do.....	645,502	667,427
Sugar :		
Sand.....tons...	24,881	31,869
Refined.....do.....	8,378	11,809
Flax.....do.....	79,410	96,997
Tow.....do.....	7,222	7,421
Hemp.....do.....	20,349	18,309
Tow.....do.....	3,557	3,160
Oil cakes :		
Flax.....do.....	43,768	37,195
Hemp.....do.....	7,042	2,365
Sunflower.....do.....	12,441	11,489
Naphtha products.....gallons...	283,074,878	211,555,892
Kerosene.....do.....	84,657,867	91,876,890
Spirits (1,000°).....do.....	541,959,320	339,900,319
Leather, raw and tanned.....pounds...	2,744,512	4,405,664
Wool :		
Washed and spun.....do.....	1,191,696	758,352
Unwashed and not spun.....do.....	3,539,976	3,422,304
Eggs.....dozens...	20,832,500	28,135,750
Lumber and timber.....rubles...	3,671,000	1,248,000

The exportation of cereals began to grow more brisk toward the end of the four months of 1895, caused by the general improvement of trade throughout the international market, and, naturally, through its influence, the interior markets in Russia were strengthened. The exportation of cereals increased every week, especially that of wheat. The statement shows that the exports increased in rye and wheat during the first four months of 1895, in comparison with the preceding year, but decreased in the other cereals, especially in oats and barley, which was caused by the demand in the home market, on account of the last year's bad crop of fodder products. The exports of oil seeds increased this year in all kinds except in hemp, for which there was a weak demand throughout the foreign market. The exports of oil cakes show a general decrease, owing to the good crop of grass fodder, which always diminishes the demand for oil cakes. The demand for flax and flax tow, which was rather quiet during the first two months of the present year, began to increase in March, and was very strong in April, at the opening of Russian navigation, so that the total export of flax during the first third of this year exceeds the amount exported during the corresponding period of 1894. Hemp and hemp tow are behind the

last year's export. The exportation of sugar has increased, and this was undoubtedly caused by the advance of sugar abroad. The exportation of spirits, owing to the low prices abroad, and the decrease in the production in Russia, is smaller than it was last year, but it should be observed that the exportation last year was extraordinarily large compared with all the other years after the closing of the Spanish markets. The exports of naphtha products have decreased in general, but the exports of kerosene have increased on account of the rise in the prices caused by a deficiency of this product in the United States.

The imports of the principal foreign goods over the European frontier, including the Black Sea frontier of the Caucasus, from January 1 to May 1, 1895, and 1894, were:

Articles.	1894.	1895.
Different kinds of teas.....pounds...	8,811,328	8,377,984
Through Irkutsk custom-house:		
Tea—		
Bohea .....do.....	8,738,902	10,580,816
Brick.....do.....	12,891,984	9,389,120
In slabs.....do.....	1,047,248	794,464
Herrings and all other dried fish.....tons...	41,583	30,226
Cast iron in clinches, scraps, etc., except such as are specially mentioned....do.....	41,637	32,808
Manganese cast iron, etc.....do.....	1,571	1,318
Iron in bars, assorted, etc.....do.....	24,339	29,937
Sheet iron:		
Including No. 25 Birmingham.....do.....	9,895	16,702
Above No. 25.....do.....	3,557	5,850
Steel:		
Assorted, scraps, etc.....do.....	5,904	4,117
Rails.....do.....	2,040	740
In sheets—		
Including No. 25 Birmingham.....do.....	2,925	560
Above No. 25.....do.....	1,011	54
Gasometers, hydrometers, etc.....do.....	10,418	12,964
Agricultural machines and implements, not specially mentioned.....do.....	5,453	5,543
Locomotives for thrashing machines.....do.....	812	451
Parts of machines of cast iron and steel.....do.....	3,088	6,085
Raw cotton.....do.....	47,993	44,977
Through the Baku custom-house.....do.....	1,860	1,625
Through the Astrakhan custom-house.....do.....	271	937
Wool:		
Not combed, undyed.....pounds...	10,689,152	8,883,552
Combed, undyed.....do.....	1,300,032	1,336,144
Spun, undyed.....do.....	541,680	686,128
Twisted—		
Undyed .....do.....	938,912	1,191,696
Dyed.....do.....	252,784	325,008
Silk for sewing, twist, tissues, etc., not dyed.....do.....	252,784	144,448

The importation of tea during the first four months of the present year has diminished, compared with last year, especially that of brick tea, with the exception of Bohea tea. The importation over the Baltic Sea frontier decreased considerably; for instance, the amount of imports through the Riga custom-house decreased this year fivefold over that of last year.

A report is circulated here that a representative of the Russian Ministry of Finance has raised a question affecting Russia's trade with the United States. This official proposes to reduce the freights on Russian railways for goods going to America by way of Hamburg with the view to increasing exports.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *July 1, 1895.*

RUSSIAN COMMERCIAL TRANSACTIONS ON A GOLD BASIS.

On May 29, 1895, a law was promulgated in the Russian Empire permitting commercial transactions to be concluded on a gold basis. The council of the Empire, consisting of the State Economy, Legislation, and Civil and Ecclesiastical Departments, considered the proposal submitted by the Minister of Finance. The president of the committee of ministers addressed the council, explaining in detail the advantages of the proposed measure, and the Minister of Finance declared that the measure introduced did not forestall in the least any steps which might be in contemplation for the introduction of a metallic currency.* He argued that the adoption of the proposed measure would tend rather to increase than to depreciate the value of the credit ruble; that the collection of taxes in credit rubles would not be affected, and that he was convinced that only extraordinary events could shake the firmness of the price of the credit ruble, which, thanks to the measures adopted, had already been maintained for two years.

The proposal was unanimously adopted by the united sections of the council, and the following ordered:

(1) That all written commercial transactions permitted by law may be concluded on a Russian gold basis.

(2) That in such transactions, the payment may be made either in gold or in Government paper money, according to the rate of exchange of gold of the day, and in case of disagreement on such rate of exchange, then according to the average rate of exchange of the St. Petersburg mint.

(3) That the rate of the revenue stamp which will have to be put on a document written for a commercial transaction in Russian gold, will be calculated by the nominal sum of the agreement.

(4) That the Minister of Finance is permitted, first, to give leave to competent establishments to accept gold money for payment of excise duty at the rate of exchange appointed by the minister himself, after informing the ruling senate of his order of adjustment, so that it may be publicly announced; and second, to communicate by telegraph such order of adjustment to competent establishments in the Empire, in order that these tele-

*Silver is the nominal standard in Russia, but paper—the credit ruble mentioned in this report—is the actual currency, and its depreciation is measured by the gold standard. The gold ruble is valued at 77.2 cents.

grams may be published, and the rate of exchange mentioned therein put into force the next day after the receipt of the telegrams.

In compliance with the foregoing order, the Minister of Finance, on June 7, authorized the provincial and district treasuries to receive gold money in payment of excise duty on tobaccos, sugars, and illuminating naphtha oils, and announced to the governing senate for publication the following rate of exchange established by him, and to remain in force from June 1 to August 31, 1895: Gold imperial, act of December 17, 1894,* equal to 14.80 credit rubles; gold half imperial, act of December 17, 1894, equal to 7.40 credit rubles; gold imperial, coined to 1886, equal to 15.24 credit rubles; gold half imperial, coined to 1886, equal to 7.62 credit rubles; gold chernovec (3-ruble gold piece), equal to 4.57 credit rubles.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *June 11, 1895.*

CURRENCY OF RUSSIA.

I beg to acknowledge the receipt of Department dispatch, dated 29th ultimo, and in compliance therewith I give the following information and answers to the questions set forth therein:

The "paper ruble"—officially called "credit ruble"—is the actual currency in Russia, in which all general business and other commercial values throughout Russia are estimated, unless otherwise directly specified.

Government values, receipts and expenditures, and imports and exports, as published yearly, are estimated on a paper basis, except customs duties, which are in gold. The silver ruble is very little in circulation, and plays only a small part in Russian currency. It passes here now at par with the paper ruble, although, some time ago it commanded a premium, and later on sold at a discount. Its value, compared with the gold ruble, is not even quoted in bulletins; only the paper ruble is so quoted. The value of the paper ruble has changed within the last four months about three times. To-day's quotation is 1 credit ruble=0.672 gold ruble.

The director of the United States Mint estimates the value of the gold ruble at 77.2 cents. Now, if the value of 1 credit ruble is estimated at 0.672 of the gold ruble, a credit ruble to-day equals 51.88 cents.

In my report of May 15, I stated the valuation of the paper ruble at 52.1 cents, but at that time it was quoted at 0.675 in gold, and, accordingly, my figures were correct.

Hereafter I shall report any change that may take place in the valuation of the credit ruble. Invoices of goods shipped from this country to the United States always give the value in paper rubles, consequently, according

*The Russian gold imperial is valued by the United States Treasury Department at \$7.71,8, which, at the official rate of exchange fixed by the Russian authorities, would make the credit (paper) ruble worth 52.15 cents. and 50.64 cents, in gold, as estimated by the 1886 and 1895 gold coinage, respectively. The Russian silver ruble—the nominal standard—was valued by the United States Treasury Department, on April 1, 1895, at 36.4 cents.

to paragraph 664 of Consular Regulations, a currency certificate is made out according to the rate of the gold ruble on that day and attached to every invoice.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *July 16, 1895.*

GOLD CERTIFICATES IN RUSSIA.

The superintendent of the Russian Government Bank publishes, to-day, rules and regulations, confirmed by the Minister of Finance, under which said bank will issue certificates of deposit payable in gold.

(1) The Government Bank, according to paragraph 148 of its statutes, will accept gold values mentioned in article 3 of these regulations, and in exchange will issue deposit certificates in Russian gold coin, and will pay at anytime the nominal sum of said certificates in the same money.

(2) Such deposit certificates will be issued by all the institutions of the Government Bank. The Minister of Finance will determine for each institution the values named in article 3, for which they may issue certificates.

(3) The bank will issue deposit certificates in exchange at the following gold values: (a) Russian and foreign coins according to the conditions mentioned in the table appended hereto; (b) bars of gold of high standard provided with certificates of assayers, counting one zolotnik (65.83 grains, troy)* of pure gold at 3 rubles 63.767 copecks in gold; (c) bank notes of foreign banks, exchangeable on presentation for gold coin, for which this authorization shall be given by the Minister of Finance; (d) certificates for gold from mining directorates at their full value, without discount; (e) coupons of bonds of Russian Government gold loans, and of gold loans guaranteed by the Russian Government, as also coupons of those loans that have been drawn with discount established by the bank; (f) foreign drafts satisfying the conditions for the purchase of drafts by the Government bank.

(4) All the gold values mentioned in article 3, will be estimated by the Russian gold coin.

(5) Deposit certificates will be issued exclusively to bearer of the following denominations: One-half imperial, 1 imperial, 5 half imperials; 5, 10, 50, and 100 imperials (one imperial containing 2 zolotniks 69.36 dolees† of pure gold, and one-half imperial, 1 zolotnik 34.68 dolees), and will be exchanged in Russian gold coin, with allowance of underweight not exceeding the limit established by article 21 of the mint regulations.

(6) If the price of the gold values brought for deposit, figured according to the calculations in articles 2-4, does not make out an even sum for which deposit certificates are issued, as provided by article 5, the excess will be paid in paper money at the rate fixed for the purchase of Russian gold coin.

* 1 Russian pound = 32 lots = 96 zolotniks, which equal in weight 25.019 cubic inches of water at 13 $\frac{1}{3}$ ° R. in vacuo (avoirdupois weight); 1 zolotnik = 96 dolees (65.83 grains troy weight).

† 96 dolees = 1 zolotnik.

(7) Deposit certificates of each value, as mentioned in article 5, will be issued in series each of 10,000 sheets. The series will be marked on the certificates by corresponding letters, and provided with ordinal numbers.

(8) The formula of these deposit certificates will be prescribed by the Minister of Finance.

(9) Simultaneously with the issuing of the deposit certificates, the Government Bank will deposit a corresponding amount of Russian gold coin into a separate fund, to guaranty these certificates, said fund to serve only for paying deposit certificates coming from circulation. In case of deficiency of Russian gold coin, foreign coins can be deposited for a certain time into the said fund at the value stated in the appendix.

(10) Deposit certificates will be accepted at par with Russian gold coin for all payments to the Government or the Government Bank which have to be made in gold. The acceptance of gold certificates instead of money in transactions between private parties, as also in the payments by the Government to private persons, will be left entirely to the discretion of the receiver.

(11) The payment of the deposit certificates in Russian gold coin will be made at the offices of the Government Bank at St. Petersburg, Moscow, Warsaw, Riga, Odessa, and Rostoff. In other banks the certificates will be paid, provided they have gold coin on hand.

(12) The institutions of the Government Bank may effect the exchange of deposit certificates of one denomination for another.

(13) Owners of deposit certificates are allowed to pay them into institutions of the Government Bank, demanding the issue of like certificates of deposit from one of the other institutions of said bank, and for such transfer no charge will be made except for telegraph expenses.

Statement showing the conditions under which the Government Bank accepts gold coins in exchange for deposit certificates.

[Deduction for each dolee below minimum weight, $3\frac{1}{2}$ gold copecks.]

Denomination of coins.	Minimum weight.		Value in gold.	
	Zolotniks.	Dolees.	Rubles.	Copecks.
Half imperial (old coinage).....	1	50	5	15
Russian chervonetz.....		87	3	09
Imperial (new coinage).....	3	01	10	.....
Half imperial.....	1	48	5	.....
20 Francs (French, Italian, Swiss, and Belgian).....	1	48.2	5	.....
8 Austrian florins.....	1	49.2	5	.....
10 German marks.....		89.2	3	08
1 English sovereign.....	1	82.7	6	30
20 United States dollars.....	3	86.4	12	95
10 Austrian crowns.....		75.9	2	62

Other foreign coins will be accepted according to the above calculation.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, July 25, 1895.

NEW PROCESS FOR KEEPING FRUIT FRESH.

The great difficulty experienced in preserving fruits in their natural state is such that the dealers who make the attempt of furnishing them out of season are compelled, on account of the heavy losses they sustain, to sell their goods at prices which render it impossible for the great majority of families to place fresh fruits on their tables during the winter months. The high prices which fresh fruits command on the city markets increase day by day from the time they are gathered, and have induced orchard and vine owners to run many risks in order to keep their fruits as long as possible before offering them for sale. And it is not surprising that no pains, efforts, and sacrifices are spared to reach the coveted result when it is known that during these last years first-class grapes sold from 2 to 4 francs (38.6 to 77.2 cents) per kilogram (2.2 pounds) from September to November, that they were worth 8 francs (\$1.53 $\frac{2}{3}$) and as much as 12 francs (\$2.31 $\frac{1}{3}$) in February and March and 14 francs (\$2.70) in April and May.

These exorbitant prices show plainly how imperfect are yet the means employed for keeping fruits fresh, how few must be the successful efforts and how many the difficulties encountered. The solution of this question is, therefore, of great interest to all, and the result of the experiments made in the latter part of the year 1894 and lately reported to the Horticultural Society of Soissons by Mr. A. Petit, chief of the laboratory of horticultural researches at the National Horticultural School of Versailles, deserves the attention and consideration of fruit growers throughout the United States.

Impressed with the powerful action of alcoholic vapors on the mold which generally appears on the surface of fruits in a damp atmosphere, Mr. Petit noticed that pears and apples kept for several months in a surrounding saturated with vapors of water and alcohol, even were they at the beginning in a state of decay, showed no signs of mold, while fruits in every particular identically similar to the former, stored under the same conditions, but not exposed to the action of alcoholic vapors, were entirely covered with it.

Taking advantage of this observation, Mr. Petit applied the principle to the preservation of fruits in general, and most particularly to grapes, because, more than others, the latter are subject to mold. It was to be foreseen that grapes kept, from the day they are cut off the vines, in an atmosphere saturated with vapors of water and alcohol would, by the retarding of the sweating period, not only remain free from mold, but would even retain their natural aspect. Consequently, should the temperature be constant and low, the preservation could be maintained long and well.

On the 31st of October, 1894—that is, very late in the season and at a very unfavorable time—Mr. Petit placed, with other fruits and a bottle filled with 100 cubic centimeters (61 cubic inches) of alcohol at 96°, some bunches of grapes known as “Chasselas de Fontainebleau,” fresh from the vine, in a brick recipient in the form of a parallelepiped, cemented inside and closed

as hermetically as possible by a common wooden door. In two similar recipients contiguous to the first, one of which was kept open and the other closed, but without alcohol, were stored similar fruits from the same trees and vines. The fruits were laid on wood shavings. The recipients were built in a very damp cellar, the temperature of which varied regularly from 10° to 8° C. (50° to $46\frac{2}{3}^{\circ}$ F.) during the whole time the experiment lasted.

On November 20, the grapes placed in the recipient left open, and especially so those in the closed recipient without alcohol, were mostly rotten and covered with mold and were immediately removed. In the recipient containing the bottle of alcohol, the grapes were beautiful; on one bunch, two grapes had turned brown, but were firm, full, and free of mold; they did not taste at all sour, thus differing essentially from moldy grapes, especially those subject to *Penicillium glaucum*. The hair hygrometer in the recipient registered 98° . On December 7, the bunches of grapes in the recipient containing the alcohol had kept their fine aspect; on most of them, however, one or two grapes had turned brown and were in the same condition as those above referred to. On December 24, same results; on most of the bunches could be seen one or two grapes commencing to decay. At the end of nearly two months, each bunch had lost but from two to four grapes each and all were in a perfect state of preservation, the stalks being perfectly green and the grapes firm, full, and savory, and having all the qualities of fresh-cut grapes.

At the conclusion of the experiment, 28 cubic centimeters (17 cubic inches) of alcohol at 60° remained in the bottle out of the 100 cubic centimeters (61 cubic inches) at 96° , but, as Mr. Petit remarks, the door of his recipient had not been built with great care and did not close hermetically, hence a useless consumption of alcohol.

This process offers many advantages. It is simple, easy of application, and cheap, and, if adopted by our fruit growers, would allow them not only to hold their fine fruits until they can dispose of them at a fair price, but would also insure them handsome profits during the winter months.

HENRY P. DU BELLET,
Consul.

RHEIMS, July 10, 1895.

HORSELESS CARRIAGES IN FRANCE.

The time seems approaching when automatic road carriages, propelled by steam, electricity, or petroleum, will come into general use and take away from the patient horse the worst part of his daily toil. The odds, at present, seem to be rather in favor of petroleum. A most interesting competition has recently taken place in France between varied specimens of motor carriages. The course prescribed was from Paris to Bordeaux—a distance of 358 miles—and back again, any vehicle to stand disqualified if it consumed more than one hundred hours on the road. The big prize of the day—40,000 francs (\$7,720)—was for four-seated carriages, which was

won by Les Fils de Pengeot frères, while Messrs. Panhard & Levasson secured second place with a two-seated carriage, making the round trip in twenty-four hours and fifty-three minutes.

The winning conveyances were propelled by gasoline, and the rate of speed was about 15 miles an hour, which is regarded as an extremely creditable performance, the long lines of hills being taken into account. These hills appear to have proved too much for the carriages propelled by electricity, of which only one got through, the others having abandoned the contest. One of the steam carriages was brought to a standstill at Versailles early in the race, owing to an accident, and the others lost time by frequent stoppages of five and ten minutes, made for the purpose of taking in coal and water. The electrical conveyances had also to stop, from time to time, to renew their dynamic charges, but the petroleum machines carried enough force for a twenty-four hours' run, and on the return journey the run was made without a single stop. In comparing the merits of the different propelling agents, the palm must, so far, be awarded to petroleum, which is clean and can be easily carried. The ordinary feeder used for short distances contains less than 4 quarts of oil, which will last over a journey of 20 miles, or two and one-half hours. For long distances, a receptacle capable of holding enough petroleum for a run of at least twenty or twenty-four hours is provided.

We hear also of bicycles propelled by petroleum, in which great interest has been exhibited, and half a dozen of such machines started in the race to Bordeaux, one, at least, holding its own among the larger vehicles. It is believed that light petroleum bicycles, tricycles, and even four-wheelers, will soon come into general use, which will tend to relieve lady cyclists from the necessity of wearing short skirts. Altogether, it seems that petroleum is destined to become the popular agent for solving the problem of traffic and conveyances without horses in the streets of great cities and on smooth country roads.

It has already made astonishing headway in the uses and industries of the world. In Japan, it has become almost the sole illuminant, and on the Caspian Sea the Russian steamers burn nothing else for their engines.

In commenting on the success of the horseless vehicles propelled by petroleum, in the race between Paris and Bordeaux, a leading English journal says:

Why is it that we are so slow in this country to take up improvements of such immense social importance? Ours is the land of machines and machinery, of skilled inventors and colossal enterprises, yet in many respects England lags behind the whole civilized world in availing herself of the discoveries of science. There is not as much use made in the whole of London of the telephone as in one single quarter of Washington City, and there are prairie towns in the West of the United States more magnificently lighted by electricity than the best street of London. Electric tram cars and tram cables may be seen in many and many a city abroad, while here they are still novelties. Years ago, the tourist might have watched a detached electric or petroleum phaeton quickly threading the thickest crowd of carriages in the Place de l'Opéra, at Paris; and now we have Frenchmen again, instead of the country-

men of Watt and of Stephenson, acting as pioneers to the new age which will certainly effect the deliverance of great cities from horse traffic, and of the horses themselves from a cruel and destructive use of their strength.

It is a circumstance which has been frequently commented on, that there are no horseless conveyances other than cycles and a few cable tram cars in London. The reason is said to be that the law restricts the adoption of horseless vehicles in England to a very great extent. They are all subject to conditions upon which alone locomotives of primitive construction, steam rollers, etc., are suffered to go through the streets. A man must go before with a red flag, and the speed must be under 4 miles in the country or 2 in the town. The restriction was probably very well before the days of rapid transit, and it may be very well yet in its application to heavy locomotives. It was no doubt intended to guard against accidents due to the frightening of horses. But horses, like human beings, soon become accustomed to new and strange sights, and are nowadays seldom frightened even by the railway locomotive; besides, it is absurd to class a light carriage with a road locomotive or steam roller, because its motive power is steam, gas, petroleum, or electricity. But since the successful experiments recently made in France, London seems to have caught the gleam of a ray of hope that horseless cabs and omnibuses may soon be seen in her streets. Mr. Shaw-Lefevre, president of the Local Government Board, has introduced into the House of Commons a bill intended to permit such carriages to be used, and they will no doubt soon become a common sight in the streets of London, as they are now in the streets of Paris, Havre, and other French cities.

C. W. CHANCELLOR,
Consul.

HAVRE, *June 24, 1895.*

TAXATION OF MINERALS IN MEXICO.

An important change has been made in the revenue laws of the Mexican Government regarding the taxation on silver and gold products, as is shown by the attached translation of the law.

This proposed law, when first spoken of, created quite a sensation in that large class owning, holding, and working the various gold and silver mines throughout this Republic. I should include in this list the owners of the smelters and the purchasers of ore throughout the country. In the smelting and mining industries, as well as in the purchase of ores for exportation, American capital is largely interested in Mexico.

The proposed law excited so much interest that the Secretary of the Treasury, Hon. Jose Y. Limantour, so I have been informed, called into daily conference a number of the leading Americans here, representing mine owners, purchasers of ore, and the owners of smelters. The same gentlemen also met, from time to time, the committees of Congress having charge of this bill. The bill, as I have been told, was proposed by the Government and accepted, with certain minor modifications, by Congress. It has been suggested that this measure might possibly be construed as an export duty, and would perhaps invoke the action of the United States in some manner by retaliatory legislation. But the Ways and Means Committee of the Senate and House of the Congress of this Republic has never contemplated

this measure as an export duty. I am reliably informed that the Secretary of the Treasury distinctly states that the tax is intended as a necessary measure for internal revenue. The legislative fact is, as it was originally submitted by the Ways and Means Committee of the House, that it was not only called an internal tax (*derecho de extraccion*, or an extraction tax), but that it was to be collected as such. In clause 5 of the attached translation, it is stated that the tax shall be payable at the Government assay offices or mints primarily. The tax not having been paid at the specified office, then becomes payable at the port of exportation. It is a tax for internal revenue levied on all gold and silver wherever produced or wherever treated, and becomes an export tax only when the products subject to the tax happen to be exported.

In order to more fully understand the matter, I will state that each individual State in Mexico has the privilege of securing, and does actually secure, a large part of its revenue by imposing what is called an "extraction tax" on ores. This, of course, applies to what are termed the "Mineral States" here.

The new federal tax amounts to 5 per cent of the value of the silver and gold, according to a standard valuation given for these metals in the body of the law itself. While it was originally the intention, as shown by the form of the first proposition, to levy and collect the tax at the time of extraction from the mine itself, it was presumably thought more expedient to collect the tax on the ores when they are centered at the various metallurgical establishments, or, if they were destined for export, at the port of exportation.

In order not to confound the federal extraction tax with the State extraction tax, the Government decided to change the name, collecting it partly as a stamp tax and partly as a coinage tax, and has provided for this tax to be collected internally with such internal inspection provisions and at the different export points, at the borders, as may be deemed necessary. This is more expedient both for the exporters of ore originating from unimportant districts where the Government would not, on account of the small volume of shipments, be justified in the expense of establishing a special officer to attend to the duties of such inspection at the point of origin of the ore. The exact method for the collection of the tax is not yet published, and awaits the rules to be formulated and to be published by the Treasury Department. It is probable that the Government may establish revenue officers in all large mining districts and at the most important smelting works in order to collect the tax internally on the ores whether shipped from their point of original production to the local smelter works or shipped to points of export. In such case, these officers would issue certificates covering each shipment, whether it be of silver bullion, base bullion, copper matte, or ore. There would also be established at the points of export inspectors whose duties it would be to permit the free exportation of such material, reaching them with the certificates of the internal collector, and who would

collect the tax on such shipments of ore or taxable material that might be intended for export, originating from points of small importance at which the Government has not placed collectors.

Another reason why this tax, in the estimation of many learned in this business, or from what may be termed the contemporaneous exposition of the law, can not be considered an export tax, is that its scope is not confined to the silver and gold exported in the form of silver bullion, base bullion, or ores, but is also levied on all silver and gold contained in ores, which are reduced locally, and which are taken to the mint for coinage. In fact, a coinage tax of approximately 5 per cent is as old as the country itself since the time of the conquest, and the object in view under the new law is to make all the silver and gold produced in the country enter under the same conditions and pay the same tax which has always been paid by such silver and gold which has been treated in the country and introduced into the mints for coinage, thereby materially increasing the revenue.

I submit a synopsis of the law itself. I have presumed to give this exposition of the law by those deeply interested in its results and workings, not from any disposition to intrude my own views, but only to place fairly before readers a law that has excited the profoundest interest here. This is eminently a mining country, and while it may apparently, in my opinion affect, to a greater or less extent, many of our countrymen holding concessions and rights in their smelting and mining operations, yet it will ultimately be visited upon the heads of those engaged in the daily operation of extracting the ores from the mines. If the metallurgical establishments which pay the tax upon the bullion and copper matte which they export should succeed in transferring the burden of the tax to miners from whom they supply themselves with ore, then it is evident that, although the smelting works established here may not suffer to any appreciable extent, the tax must become an additional burden on mines and mining interests. In this sense it would affect, to a greater or less extent, those already engaged, or intending to engage, in mining operations in this Republic.

This law goes into effect presumably on July 1, 1895, and will pay a tax of 3 per cent as a federal stamp tax, and 2 per cent coinage tax, aggregating the 5 per cent. From the 3 per cent tax there are no exemptions made by the law in favor of anyone, or for any purpose. From the 2 per cent coinage tax there is but one exemption, viz, smelters operating in this country (and let me here say they are generally American enterprises) under concessions granted them by this Government will not pay the coinage tax on the silver contained in their lead bullion if the assay value of such bullion does not exceed seven-thousandths, say 204 troy ounces per ton; the coinage tax will not be paid on silver contained in copper matte shipped by such smelters unless the assay contents exceeds twenty-thousandths, say 503 troy ounces per ton. In case these limits are exceeded, both the stamp and coinage tax must be paid on the excess. The gold contents of both the bullion and matte must pay the full 5 per cent tax.

I have given these details merely to show that the whole law is intended for revenue purposes alone, and contemplates nothing like a taxation because of exportation. It has even been stated to me, and perhaps with some truth, that should this Government have any underlying idea of a protective effect of the new law which is not apparent, and should the United States reimpose the duties provided for by a former law, then the object of this Government, should such an object exist, would be accomplished more fully by such action on the part of the United States, without the odium of an exportation tax attaching to this Government.

THOS. T. CRITTENDEN,
Consul-General.

MEXICO, *June 6, 1895.*

SYNOPSIS OF THE LAW.

Besides the duties fixed by articles 4, 5, and 6 of the decree of June 6, 1887, silver and gold will pay to the federation the taxes of coinage, stamps, refining, smelting, assay, and parting in accordance with the following bases :

(1) From July 1, next, introducers of silver and gold at the mints will cease to suffer the discount on the intrinsic value of these metals which has been collected to cover the coinage tax and the cost of coinage. They will be credited at the rate of \$40.915 per kilogram of fine silver and \$675.417 per kilogram of fine gold. These values will serve as a basis for the payment of the taxes of coinage and stamps which are detailed below.

(2) The coinage taxes on silver and gold will be reduced to 2 per cent of their value, this payment being made in silver coin

(3) The stamp charges assigned by the tariff of the law of April 25, 1893, for the statements of account issued by the mint are abolished, as also the charge fixed by the same tariff on ores of gold and silver, and, in substitution of the said charges, there is established a stamp tax on gold and silver whose rate shall be 3 per cent on the value of the gold and silver. No one shall be exempted from the payment of this tax.

(4) The taxes of coinage and stamps shall be created, not only by the silver and gold introduced into the mints, but also by the metals which are exported in mixed ingots of these metals, or in ingots of only one of the metals, and also by sulphides of silver, argentiferous lead and copper ores in their natural state or which have been partially treated, and any alloy, object, or substance which contains silver or gold.

(5) The taxes of coinage and stamps shall be paid at the assay offices or at the mints. Those persons liable to the tax who shall not have made this interior payment at the offices mentioned, shall do so at the frontier or maritime custom-houses on remitting to foreign parts silver, gold, or mineral substances containing these metals.

(6) There shall be exempted from the payment of the coinage tax corresponding to the silver exported by them only those metallurgical establishments which at present enjoy this franchise in accordance with their existing contracts, provided that the contents of silver in the argentiferous lead shall not exceed seven-thousandths, and that in copper matte it shall not exceed twenty-thousandths. In case the contents of silver be greater than said proportion, the establishments here named shall pay the coinage tax on the excess.

(7) Ores of gold and silver, which are exported in their natural state or only mechanically concentrated, shall pay the taxes of coinage and stamps on the value of the gold and silver contained, after deducting 10 per cent of the contents.

(8) The franchise of three-thousandths heretofore enjoyed by the exporters of certain classes of mineral substances is abolished.

(9) The taxes of refining, melting, assay, and parting shall be caused and paid in accordance with the tariffs which the Treasury Department shall formulate and publish.

(10) Producers of silver containing gold may separate these metals at liberty in private establishments, and, in case the *doré* silver be entered at any separating establishment belonging to the Government, they can demand that the gold be separated to the limit which they may determine, paying the separating tax per kilogram as fixed by the tariffs published by the Treasury Department.

(11) The federal Executive shall establish the penalties which shall be applied to those who should attempt to defraud, or should defraud, in the payment of the taxes on gold and silver. Exportation without the payment of the corresponding taxes shall be considered as contraband.

(12) All existing laws and rulings relating to the federal taxes on gold and silver contrary, in any respect, to the foregoing bases, are repealed on and after July 1.

ART. 8. The Executive is authorized to issue, during the approaching recess of the Congress, a special law which shall comprise, substantially, the prescriptions fixed by Section XVII of article 1 of the present law, on the taxes on gold and silver, with such modifications and alterations as he may deem advisable, actuated by the principles which have served as a foundation for the establishment of said taxes.

The Executive shall report to the Congress at the next session the use which he shall have made of his authorization.

A UNITED STATES BOND COMPANY'S CONTRACT.

Mr. E. C. Butler, United States chargé d'affaires at the city of Mexico, writes to the Department under date of June 22:

As additional evidence of the growing ascendancy of American interests in Mexico, I invite your notice to the contract entered into between the Mexican Government and the American Surety Company of New York for the bonding of public officials, private parties, corporations, etc., in this country.

The contract provides that the company shall establish in the city of Mexico, complying with the provisions of the commercial code of the United States of Mexico, a branch, with its respective offices, for the issue, without any limitation whatever and in due legal form, of all classes of bonds, guaranties, and other obligations of the same character that may be legally contracted and executed, whether respecting the employees of the federal Government of Mexico or those of the States, districts, the Territories, municipalities, corporations, companies, and private individuals.

The legal residence of the company in the Republic will be in the city of Mexico, and it will keep in that city a representative who shall be sufficiently empowered to represent it both in and out of court in all business which it may do, and with entire liberty to establish agencies in those parts of the country which may be required by its interests.

The company will always be considered as Mexican in all matters referring to this contract, even should one or more of its members be foreigners; and it will be exclusively subject to the jurisdiction of the competent tribunals and authorities of the Republic in all matters whose origin or

action may take place within the territory thereof, and under no pretext whatever will it be allowed to claim foreign rights, nor will it be allowed to transfer this concession without the previous permission of the Department of the Treasury.

UNITED STATES TRADE WITH MEXICO.

I have the honor to submit my report for the fiscal year ending June 30, which presents many satisfactory features. The year has been one of great prosperity and increased business relations between the two countries divided by the Rio Grande. Crops of all kinds have not been so abundant in six years, corn yielding from 50 to 100 bushels per acre. If rains continue, the second crop of maize will soon be planted, together with *frijoles* (beans), *calabasas* (pumpkins), etc. Corn is selling at 50 cents per bushel American currency (\$1 Mexican) and will decline still lower, as the new crop is being harvested. But little cotton is planted on either side of the Rio Grande, as the crop has been destroyed during the past three years by the weevil, which has been well described by the Government's special agent, Professor Townsend, at Brownsville, Tex. The crop will be very small, and is sold to the cotton mills at Monterey for 16 to 18 cents (Mexican). These mills buy largely of American cotton, both in San Antonio and New Orleans. The mills in the south of Mexico ship through Veracruz, while the mills in Saltillo and Monterey buy in San Antonio. Large quantities of wool have also been purchased in Texas recently for these mills by Mexican buyers.

Mexico is increasing her manufactures in every branch of trade possible, as heretofore she has been dependent on foreign countries for her manufactured goods.

The new developments mentioned in a former report as probable as affecting the transportation facilities of southwest Texas and Mexico assume the greatest importance, now that deep water is made certain for Aransas Pass, through negotiations with Alexander Brown & Son, of Baltimore, who have signed a contract to furnish more than \$500,000 to open up this fine harbor to ocean-going steamers drawing 26 feet of water over the bar. Corpus Christi, which commands this vast undeveloped region known as southwest Texas, will, when Aransas Pass is opened, load and receive the greatest ships from New York and Liverpool, rivaling Galveston and New Orleans as a shipping port.

The charter for the Gulf Coast Canal and Navigation Company to construct a canal from Galveston south to Brazos has been granted, and work on this great inside channel along the southern coast is soon to commence. With deep water over the bar at Corpus Christi and the canal completed to Brazos (near the mouth of the Rio Grande), railroads will be built reaching out in all directions from Corpus Christi that will bring to southwest Texas capital and immigration. A railroad to Brownsville would suggest its extension south from Matamoros to Tampico, opening up the regions of the Gulf

coast, from which the United States could be supplied with coffee and all kinds of fruit and early vegetables. Another new railroad is to be built, and work has already commenced on a line from Barroteran on the Mexican International Railroad, running to Laredo, Tex., and from Laredo to Mier, Mexico, on the bed of the Gould railroad, that was graded about ten years ago between these two points. From Mier, it will go southeast near iron deposits, and salt lakes of immense value, terminating at Tampico, on the Gulf of Mexico. Should this entire line be constructed, the immense coal deposits at Barroteran will be developed and coal delivered at Tampico at low prices. The Mexican National Railroad now running from Matamoros to San Miguel would then be extended 35 miles to connect with the new line at Mier, thereby giving continuous travel to Laredo.

The social and political conditions of this consular district have remained undisturbed, tranquility and peace prevailing along the border.

I note with gratification the large increase in our export trade, the exports having increased nearly \$50,000 over the previous year. This increase in exports is shown under the operation of the new tariff, which has resulted in increased commercial relations between the two countries. Wool, cattle, and hides have been active, and a large advance is noticeable in prices. American goods are sold here almost exclusively, only about 20 per cent being imported from Europe.

Windmills and other means of irrigation are being introduced, all of American manufacture. Labor of all classes is paid in Mexican coin, being about half the wages paid in the United States.

The export of oranges and fruits, in consequence of the freeze in Florida during the past winter, will be largely increased from Victoria, Tampico, and Linares. Inquiries from American merchants are being made through this consulate for Mexican oranges, and if a line of fast steamers were put on between Tampico and Galveston (three days) the gulf coast of Mexico would soon rival the east coast of Florida in its production of early vegetables and tropical fruit.

J. B. GORMAN,
Consul.

MATAMOROS, *July 12, 1895.*

TEHUANTEPEC RAILROAD CONTRACT.

Under date of June 15, 1895, Secretary Butler writes from Mexico :

Herewith I submit, in text and translation, a federal decree published in the *Diario Oficial* of the 12th instant, confirming a contract made by the Mexican Government with Messrs. Samuel Bros., of this city, for the equipment of the Tehuantepec National Railroad.*

The materials to be supplied include locomotives, turntables, cars, machinery, dredges, launches, lighters, etc. The amount authorized for expenditures under the contract is not to exceed \$1,000,000 in American coin, payable at the rate of \$250,000 per annum.

The supplies are to be purchased in the United States, though the contractors are an English firm.

*Copy of decree filed in the Department of State.

JAPANESE COMMERCE WITH CHINA AND KOREA.

The results of the recent war between Japan and China will naturally present new questions relating to the commerce of these two countries and Korea. The channels in which this business will flow are not yet sufficiently defined for reliable conclusions, but opinions from competent sources may furnish grounds for intelligent speculation.

At this time, when inquiry on the line indicated is most energetic, the views of Mr. Oteri, Japanese ex-minister to China and Korea, and now a member of the privy council of Japan, will be welcomed as of special value.

The competition already prevalent among Japanese merchants for Korean trade is noted with regret by Mr. Oteri and characterized by him as vicious. The perpetual attempt of these rival merchants to undersell each other has so demoralized the trade competed for as to eliminate profit to the extent of ruining the fortunes of many. When war was declared between Japan and China, it appears that Chinese merchants left the Korean markets almost solely to the Japanese merchants, and the sudden disbursement of a large amount of money in Korea as war expenditures increased the purchasing power of the Koreans, and, consequently, gave new activity to their markets. This stimulus was further increased by the influx of Japanese military men and coolies, followed by an influx of Japanese merchants, bringing such goods as they considered likely to be in demand. So great was the number of these newcomers, writes Mr. Oteri, that each steamer entering a Korean harbor from Japan was literally laden with tradesmen and their goods, and on landing great inconvenience was experienced in procuring houses for personal accommodations and storage. As the Japanese troops immediately marched from the port of landing toward the interior of Korea, the anticipated demand for the merchandise thus imported was not realized, and the supply soon became excessive and encouraged the practice of underselling, with ruinous consequences.

The ex-minister thinks such procedure a bad preface to making Japan the sole supply of goods to Korea, as it fosters the habit of deteriorating merchandise to enable sales at cheap prices, thus creating suspicions fatal to permanent trade. From the attitude of Mr. Oteri in this special connection, the inference is clear that he entertains the commendable ambition of making Japan the chief reservoir of Korean wants.

In order to escape the repetition of the mistake pointed out, Mr. Oteri counsels his countrymen to organize a competent body out of merchants trading in Korea, induce a number of wealthy traders to amalgamate into a common concern and retail the goods on easy terms to petty agents. The present condition of Korea is represented as being suited to itinerant peddlers, and by means of such agents Japan may hope to penetrate to every corner of the Korean peninsula and place her productions within reach of every demand therein.

It will be seen that the leaders of Japanese commercial thought are considering the advantages of systematizing the trade relations of the Empire, and in commerce, as in war, to move "four square." The first principle underlying successful commerce is to learn the needs and wants of a nation, what is most acceptable in exchange for its productions, and to govern mercantile ventures accordingly. Failure to observe this cardinal principle in dealing with Asiatic nations will again be attended with disappointed hopes and stranded ventures.

Leaving Korea for China, Mr. Oteri advises his countrymen to be careful in selecting the proper districts for commercial transactions. Southern China is regarded as of more importance, commercially, than northern China, but the former field is more generally covered by foreign merchants, and southern Chinamen are thought to be more difficult to deal with; but in northern China the markets are comparatively untouched and the inhabitants are simpler, Tien-Tsin and Niuchwang being considered the most suitable localities for the introduction of business. The exercise of patience, writes Mr. Oteri, will bring success.

The ostentation displayed in Japan is not advised in dealing with Chinamen; and as the Chinese are a plain, frugal, and hard-working people, outward displays in newly opened shops are looked upon as signs of speculation with the tendency of deterring customers.

The system of payment is also to be considered. In China, payments are made periodically—about the 5th of May, the 15th of July, and the end of December. This custom of meeting obligations necessitates conducting business on the credit system, and, consequently, requires more capital than in business conducted on a cash basis.

Chinese merchants, as a class, are honest. They meet their obligations as promptly, perhaps, as any merchants in the world. The foreign banks and business houses in China will bear willing testimony to the general uprightness of the merchants of China, and in dealing with them it will be found that they seldom violate their word.

There is one feature of the relations between the merchants and farmers of China that seems to have been borrowed from America, but which is Chinese, and doubtless was a part of the business transactions between mercantile and commercial classes of China before America was discovered. It is the crop lien. The information I have on this immediate subject relates more particularly to Shunking. There, it is represented that in proportion to the general status of the people, the number of wealthy farmers and merchants is very considerable; and it is the custom for the merchants to advance money on goods to the small farmers and take as security the unharvested crop. Thus, tempted by immediate gain, which invariably blinds foresight, the farmer yields, and when his crop is harvested finds but little remaining after satisfying obligations incurred when planting and cultivating it. The making of liens on growing crops, or on crops to be grown, was a practice of the Chinese farmer long before it was introduced into the occi-

dental world, and with the results attending its practice in the United States.

To the merchants of the United States who contemplate business with the three Asiatic nations named, this general summary of Mr. Oteri's views may be of some interest. Another subject they may deem worthy of consideration is that there is not a banking institution conducted by American capital and Americans in either of the nations named. The establishment of a bank in China or Japan by American capitalists would, at least, give the color of permanency to American enterprise in Asia.

With a country incomparable in resources, and acknowledged to be the wealthiest in the world, the question may well be asked, Why should not American capitalists recognize a primary principle in the extension of the trade relations of their country? Great Britain, France, and Germany have banks in China and Japan, and the merchants of these nations are supported by the banking institutions of their own countries, and they have been dividing the profits of Asiatic commerce. American merchants in Asia have no such encouragement, and are compelled to transact their business through foreign banks.

Not many years ago, the American interest was of first consideration at Shanghai, and American commerce whitened Asiatic seas. Now other nations are pushing ahead, although, geographically, the United States should dominate and supply with the overproductions of their fertile fields the markets of the swarming millions of Asia.

T. R. JERNIGAN,
Consul-General.

SHANGHAI, *May 3, 1895.*

COMMERCIAL ADVANTAGE OF THE CHINESE-JAPANESE TREATY.

The Japanese press is devoting much space to discussing the commercial advantages accruing from the treaty of peace recently concluded between China and Japan. The treaties heretofore existing between these countries contained no "favored-nation clause;" and the advantages enjoyed in the commerce of China by other foreign nations were not allowed to Japan, as the previous treaties were strictly construed against the latter nation. But the treaty just concluded does contain the "favored-nation clause," and, in addition to conceding the commercial equality of Japan, contains other concessions beneficial to, and expansive of, Asiatic commerce. These new advantages are made clearer by comparisons, and from the comparisons it will also appear that the success of Japan has given to the world new markets and avenues of trade.

Previous to the treaty there were twenty-five Chinese ports at which western ships could call, but only fifteen ports were open to the call of Japanese ships.

To this larger number, three new ports have been added by the terms of the treaty—Chunking, Soochow, and Hang-chow—making in all twenty-eight open to commerce, and giving to western nations, having the “favored-nation clause” in their treaties with China, the equal right, with Japan, to enter the new ports with their ships, and to Japan, now having the “favored-nation clause” in the treaty with China, the right to enter with her ships all of the twenty-eight open ports.

Japan was under other restrictions which did not apply to western nations. The merchants of Europe and America were free to trade in the interior of China, while Japanese merchants were compelled to confine themselves within the limited bounds of the settlements at the open ports; the goods imported by Japanese merchants were subjected to heavy imports in passing into the interior, while the goods of western merchants had simply to pay transit dues amounting to one-half of the sum levied by the customs. But there is one provision of the treaty which exempts the merchandise of western merchants of an additional charge, for, although free to carry goods in the interior on the payment of comparatively small import duties, they were required to pay heavy transit dues when they desired to store goods in the interior. This inconvenience the new treaty removes.

The most important provision of the treaty is that which makes it free to carry on manufacturing industries. This provision virtually opens China to new enterprises, and the kindred provision, relating to the free import of machinery, may be accepted as fully explanatory of the article contained in the commercial treaty between China and western nations, being the first definite statement as to machinery which, in the past, has been imported under the name of commodities. Only a few years ago, when cotton gins were sent from Japan to Shanghai, the customs authorities objected on the ground that China did not allow foreigners to engage in manufacturing industries in the interior, and, therefore, the importation of machinery for manufacturing purposes could not be permitted. About this question there can be no more doubt, and machinery, as well as other merchandise, can be imported.

These comparisons relate specially to privileges more in favor of a freer commerce, and it is alike creditable to both Japan and China that, in the adjustment of their difficulties, the liberal spirit of commerce was recognized as a potential and essential factor in the friendship of nations.

Whatever of martial prowess may be claimed as the trophy of the war, the provisions of the treaty which supplant hostile banners in Asiatic seas with the ensigns of advancing commerce will carry greater blessings to mankind and shine in history with more enduring luster.

This brief comparison shows that a decided opening has been made in the opposing wall of Chinese conservatism, and that a widening market may be expected for western productions.

If American capitalists and merchants propose to make permanent business investments in China, they should study with the greatest diligence the

wants of the Chinese, and not venture too far without accurately estimating all the surroundings.

It may be said that China is the great undeveloped country of the world, and that new developments, attended with profit, await well-directed enterprises in this Empire.

In this connection I will make one observation which merits careful consideration. It is a fact that several American firms in China and Japan have foreigners for their head agents. These firms are under the protection of the American flag, but the gentlemen who direct the business of the same are under the protection of a foreign flag. It is not meant to disparage, in any sense, the abilities of the agents of such nationalities, but my confidence in the special capacity of Americans remains unshaken for developing our trade with these countries.

T. R. JERNIGAN,
Consul-General.

SHANGHAI, *May 10, 1895.*

TRADE OF FORMOSA.

A report on the trade of Tamsui, the principal port of Formosa, may be of interest, now that the island has become a part of Japan. Formosa is thought to be rich in resources, and these will now be more largely developed. It will be noticed that our trade in kerosene oil nearly doubled during the past year, and most of the tea of Formosa is consumed in the United States.

Mr. H. B. Morse, the acting commissioner of customs at Tamsui, has made an interesting report on its trade for 1894. The statistics adduced by Mr. Morse indicate the extent and tendency of the trade. The increase in value over the trade of 1893 is noted, and attributed, in the beginning of 1894, to an increase in the value of war material; but the progress of the war does not appear to have affected the normal condition of trade, thus showing the healthful elements that entered into it.

The foreign imports are classed as chiefly from Hongkong, but probably much that is credited to Hongkong may have been landed there for reshipment. The total shows an increase of 34 per cent over the figures of 1893, but if the value of opium for 1893 and 1894 be deducted, there was an advance during the latter year of over 50 per cent, and if war material be deducted, there was still an advance of 35 per cent. These facts prove the steady upward tendency of the trade, more encouraging than at some other Asiatic ports, affected by like causes, but which yielded before them.

Mr. Morse thinks that much of the increase in the value of foreign products comes from the enhanced silver cost of goods which must be paid for in gold, and reasons thus: Exclude opium and take the four most important items in the trade table, and gray and white shirtings increased in quantity 42 per cent and in value 64 per cent; camlets rose 30 per cent in quantity and 44 per cent in value; lead, 31 per cent in quantity and 55 per cent in

value; and kerosene oil, 58 per cent in quantity and 80 per cent in value. In this immediate connection, I give the words of the Commissioner:

In my report for 1893, I referred to the prosperity which inflated silver values were likely to bring to the producers of this district; in 1892, they were paid for their tea at the rate of 21.43 Haikwan taels* per picul,† which was increased in 1893 to 24.81 Haikwan taels, and in 1894, to 26.26 Haikwan taels. The direct result is visible in the increased quantity of imports consumed, but the reverse of the picture begins to be observed in the higher price paid for those imports.

In cotton goods, there was a gain of all kinds, and the total number of pieces was 44 per cent greater for the product of western looms and 74 per cent for Japanese fabrics.

The following table shows the competition between western and Asiatic looms and spindles:

Description.	1892.		1893.		1894.	
	Value.	Per cent.	Value.	Per cent.	Value.	Per cent.
	<i>Hk. taels.</i>		<i>Hk. taels.</i>		<i>Hk. taels.</i>	
Western cotton products.....	194,419	68.6	196,773	60.6	331,825	65
India cotton products.....	10,280	3.6	14,288	4.4	23,898	4.7
Japanese cotton products.....	16,048	5.7	26,563	8.2	50,313	9.8
Chinese cotton cloth.....	17,490	6.2	24,334	7.5	30,328	5.9
Chinese grass cloth.....	45,142	15.9	62,634	19.3	74,818	14.6
	88,960	31.4	127,819	39.4	179,357	35
Total.....	283,379	.....	324,592	.....	511,182	.....

The steady gain thus indicated by Japanese looms may be regarded by western manufacturers somewhat as the Hollander regards the first leak in the dikes which protect the meadows of his home from overflow. The future of Japan is evidently that of a manufacturing nation. The enterprises of her business classes are seen in every port of the Empire, and with their looms and factories, they commendably aspire to supply the wants of the vast Asiatic population. Commercially, Japan is mapping new avenues for her products, establishing banks at all the leading ports of the world, nationalizing her trade as does the Saxon, and identifying herself with those civilizing agencies which internationalize and belt the world with a community of interests.

The raw materials necessary to feed the looms and factories of Japan must be imported. They can not be sufficiently produced in Japan, and it is important to the business men of the United States to consider if some compensating route cannot be found to our cotton fields for the enterprising Japanese.

Of the imported articles that show a very decided increase, Japanese matches deserve special mention, as these advanced from 142,900 gross

*The Haikwan tael, as valued by the United States Treasury, was worth \$1.08 in 1892, 97.05 cents in 1893, and 78.15 cents in 1894.

†1 picul=133½ pounds.

boxes to 203,000 gross boxes; kerosene oil increased from 872,900 gallons to 1,377,325 gallons, of which 66 per cent were American and 33 per cent Russian, against 49 and 51 per cent, respectively, in 1893. In November, for the first time, Lankat oil, produced and refined in Sumatra, was imported to the quantity of 21,000 gallons, and invoiced at about the same value as American oil.

There was a slight decrease in exports, camphor representing 91 per cent of the value of this trade, but the production of camphor was much restricted, owing to the incursions of savages, these having greater sway from the withdrawal of the frontier troops for duty on the coast.

The value of the import and export trade for 1894 is shown by the following table:

<i>Imports.</i>		Haikwan taels.
Net foreign imports (market value).....		2,722,843
Net native imports (market value).....		698,644
Net imports.....		3,421,487
Deduct duties and likin paid at Tamsui.....		248,068
Net imports, minus duty.....		3,173,419
Deduct 7 per cent for importers' profit, etc.....		222,139
Value of imports at moment of landing.....		2,951,280
<i>Exports.</i>		
Original exports (market value).....		4,884,461
Add duty paid at Tamsui.....		409,692
Exports, plus duty.....		5,294,153
Add 8 per cent on market value for exporters' profit, etc.....		390,757
Value of exports at moment of shipment.....		5,684,910

It is the consensus of opinion here that a new future has opened for Formosa. The island is believed to be rich in capacities, and it is thought that these will be developed under the enterprise of Japan, now that it has been made a part of that nation by the results of the war with China.

Whatever view may be entertained as to the future trade tendencies of Asia, the prediction may be safely ventured that even China must wake up to an appreciation that, to move in her old grooves, is to invite new dangers and encourage new foes. Certainly, the influence of China upon neighboring countries in her ways of thought and action is no longer potent, for there is no receding ebb to the current of enlightened progress which sets out from the shores of Japan, and which received its first momentum from the foresight and prudence of our own Commodore Perry. Its identity can not be mistaken, and its progress can no longer be arrested by opposing barriers of conservatism.

T. R. JERNIGAN,
Consul-General.

SHANGHAI, May 31, 1895.

MISREPRESENTATION OF AMERICAN CANNED GOODS.

I inclose herewith a clipping from the China Gazette (a paper published in Shanghai) of May 7 containing an article from the Medical Press Circular, which, owing to its nature, I think should be handed to the honorable Secretary of Agriculture for such action as he may deem proper.* The animus of such article is not hard to divine, for it is well known that the market for American canned meats, etc., is a large and constantly increasing one in the Orient, and, consequently, the demand for the products of Europe are fast diminishing.

All newspapers of the East are entirely in the hands of the English, and they never let an opportunity pass whereby they can make some disparaging remarks upon American products.

JOHN FOWLER,
Consul.

NINGPO, *May 17, 1895.*

[Extract from the China Gazette, Shanghai, May 7, 1895.]

Some very harrowing details are to hand concerning the preparation and packing of meat at Chicago for export. It is stated, on what appears to be good authority, that the precaution enjoined with the object of preventing the use of flesh from animals suffering from actinomycosis, that newly discovered and terrible fungoid disease, are systematically set at naught by unscrupulous persons. It is stated that a bill is now before Congress to amend the law by the imposition of a penalty for any infraction of the rules, but it is useless to impose penalties unless there be some guaranty of their being enforced. Even more revolting are the details of the preparation of "extracts of beef," which are offered to the public in dainty jars, but are often made from the sweepings and drainings of the refuse from the canning rooms and cellars. The tanks of this "extract of filth" are left open, and the bodies of dead rats, in an advanced state of decomposition, are from time to time withdrawn before the delicious and nourishing compound is ladled into the dainty jars aforesaid. No analysis or other method of examination can be relied upon to reveal the antecedents of these extracts, now so largely used by all classes throughout the land. (Medical Press and Circular.)

TROUT FARMS IN BOHEMIA.

The growth of the population in the Eastern, Middle, and Central States of the American Union, together with the decline of profits in the larger forms of agriculture there, has already turned the attention of farmers and landowners to sources of support very different from those by which the old population lived, but fish as a marketable farm product is still neglected.

I need not refer to results obtained by the United States Fish Commission, nor to efforts on the part of States to stock their own rivers, lakes,

*Copy transmitted to the Department of Agriculture.

and ponds. I speak more particularly of the brooks, water courses, and chains of small clear-water lakes in the United States now in private hands or the property of cities, towns, corporations, and clubs, which add nothing to the wealth of the country by being intelligently farmed, thus failing to furnish the local markets with fresh fish at reasonable rates.

I have the honor to send you herewith a series of illustrations of a practical plan for laying out a small fish farm, suited to small brooks or streams and capable of producing trout, salmon trout, land-locked salmon, grayling, and their several crosses and interbreeds; also black bass and other fish that need clean, lively, and cool water in which to prosper.

It is a system proposed by Mr. Karl Wozelka, a practical fish grower, living in Iglau, Bohemia. It has just appeared in Nos. 28 and 31 of the *Deutsche Landwirthschaftliche Presse*, under dates of April 6 and 17. To the illustrations I add a digest of the text supplied by the author.

Fig. 1 shows a trout farm adapted to a mill stream or ordinary brook. The middle line is the smoothed and straightened natural bed; the two embracing side canals are artificial courses to carry off the water in freshets; the ponds between these "escapes" and the brook itself are artificial breeding ponds, with sluices at their narrow parts to admit and drain off water slowly from and again into the brook. Observe that there are sluice dams down the brook at intervals and that canals into and from the breeding ponds on opposite sides of the brook never issue at the same spot, in order to avoid too great a rush of water.

The first object to be sought is to control the water of the stream in such a way that freshets and droughts will not materially change the levels in the various sections of the system, in such way, moreover, that without affecting the rest of the system, the main bed itself, or any part of the system, may be laid dry when required, the fish taken out and repairs made to bottoms, sides, sluices, and gratings, while the rest of the system remains full of water. The bed of the stream itself, as well as the bottom of the artificial branches and the sloping sides of canals into the breeding ponds, should be made uniform so, that as the water is gradually shut off from a given part, there will be no pockets of water left and the fish will assemble toward the lower end, where they can be more easily handled. The next object is to keep out the natural enemies of small fish, such as pickerel and larger fish of the same species.



Fig. 2.—Sluice with fish runs (front).

Fig. 3.—Sluice with fish runs (side).

Figs. 2 and 3 show, in front view and a profile, the kind of sluices recommended, over which the water falls, thereby adding to the aëration of the

water and giving fish the bubbly live water they like, and through which, by means of the oval hole, fish can ascend the stream when they wish. These sluices must be frequent in a brook with a sharp pitch; fewer are needed in a quieter flow.

Fig. 4.—Permanent fish grating

Fig. 5.—Temporary wooden dam.

Fig. 4 is a solid permanent grating of galvanized wire flush with the banks, to prevent the fish from escaping up or down stream. They are permanent at the upper and lower waters of the trout farm.

Fig. 5 is a wooden dam brought into play when the water is to be shut off entirely from a canal that feeds or empties a breeding pond.

Fig. 6.—Head of farm water gate, grating, and side escapes

Fig. 6 shows the head of the farm from a bird's-eye view. On the right, two surface rakes to catch logs and branches; in the center, the arrangement for distributing superfluous water right and left around the farm as soon as it tops the dams; to the left, the permanent sluice gate, which controls the supply to the brook and surrounding ponds, and, just below it, the upper wire grating that prevents the fish from escaping up stream.



Fig. 7.—Sections emptied to clear of fish, repair, etc.

Fig. 7 shows two sections in profile with solid sluices down and the water remaining in each collected toward the lower end for convenience of taking out the fish.

Fig. 8 is a section of a canal, with bundles of fagots resting in holes in its bed. These fagots form refuges and breeding places for swarms of fresh-water shrimps, the natural food of small game fish.

Fig. 8.—Cross section, with nests for living fish food.

For such a farm the California Rainbow trout is particularly recommended, owing to its rapid increase in size and weight. Crosses between brook trout and salmon trout and between salmon and trout should be tried. The best way to begin is to buy fertilized eggs and hatch them in boxes with falling water and sandy, gravelly bottoms, where many nooks and crevices are arranged in which the fry can hide. After the fish grow large enough they get worms, grubs, and living insects. With abundant food, from twenty to thirty young growing fish can be allowed to the cubic yard of water.

Natural feed can be arranged as follows: Colonies of the fresh-water shrimps can be reared in holes in the canals, and protected from extermination by clumps of fagots kept in place by stones (see fig. 8). When this food is needed in quantity, these fagots can be hoisted up and shaken out on a piece of cloth; the crustaceans are then fed to the fish. Along the ponds and canals growths of willow should be planted, partly to provide shade and partly to attract insects that lay their eggs in water and fall in themselves. Caterpillars, beetles, and other creatures that frequent willows are easily shaken into the water at night or in the early morning from the rows of young trees. Grasshoppers can be driven into the water by beating the copse at noon; the fish eat them greedily. Beside the willows, it is well to have floating boards to give the necessary shade, especially in so sunny a land as the United States.

In order to keep a single pond or a series of ponds apart for the use of certain fish, iron gratings like those that guard the whole farm up stream and down stream (see fig. 4) can be firmly planted where the water enters from the brook, and where it flows out again into the brook. Observe that these entrance and exit canals should be made of the same size, so that the gratings, dams, and closing sluices may also be of one size, a spare one being always ready to replace a broken or defective one, or to plant it where it will stop or regulate the water supply. To prevent the side escapes during freshets from being bored out by the rush of water, or when it is necessary to lay the brook itself dry, these canals should be grassed over, or, if that is not practicable, set with stones, so that the water falls from stone to stone. To lay the brook's bed dry, it is only necessary, beginning down stream, to close

off the side ponds with solid board dams (fig. 5), two or more to each canal, according to the pitch of the canal, thus closing entrance and exit, gradually working up stream till all are cut off. Then the main sluice or water gate shown in fig. 6 is gradually worked down until the water flows off right and left around the farm and rejoins the brook below. As the level sinks in the brook, the fish huddle toward the lower permanent grating, where they can be netted and placed in tanks, or killed and packed in ice.

Owing to the cannibal instincts of game fish, it is necessary to have the inhabitants of one part of the complex all of the same age, otherwise the little ones disappear. Of course, the water must be clean and bright; the springs that feed the brook should be under the control of the farmer. When fish are present in great numbers, they naturally require more food than the brook itself affords, while abundance of food brings them quickly to the right size for the market. One part of the farm may be adapted to raising other than game fish. It is possible to raise carp, for instance, on the same farm, assigning to that fish any low-lying muddy pond which might be too sluggish a place for trout.

This system is applicable to land above mills which owners possess or control for mill purposes; to parks and reservations near towns and cities; to lands owned or leased by fishing clubs or by corporations like that of Tuxedo Park, N. Y., where trout hatcheries and runs already exist. Many hilly districts, no longer valuable for their wood and never to be reclaimed for agriculture, might be made by this means a source of profit to their owners. The same may be said for many small lakes, now only used to produce ice, which are already owned and improved with buildings where guards could live, thus saving many large expenses at the outset. It is nevertheless true that, when such a farm is once under way, it can be carried on at a minimum of cash outlay.

Of course, no man who gave labor and money to the founding of a fish farm would be likely to suppose that such an establishment needs little care and wit to keep in condition and make profitable. Fish can not be left to themselves; they must be guarded from poachers by night, two-legged and four-legged. In our land, wild and tame cats, mink, weasels, and muskrats, certain birds and snakes prey on fish. Even the twilight-loving *Mephitis americana* is said to like fish. The larvæ of certain insects devour the spawn, and the "boatman" beetle, which swims as swiftly as it flies, kills the newly hatched fry with its sharp beak. The fish farmer must study the points of his own locality and adopt measures to meet his own difficulties, which will vary greatly, according as his land lies near towns or in woody regions—in places where wild creatures, or men, are more to be feared.

Fish grown for profit are also liable to sudden epidemics, and will sometimes die in masses. When this occurs, the fish farmer generally lays it to the malevolence of some jealous neighbor, who has poisoned the water. In fact, sometimes this may occur, hence the wisdom of a night patrol, by whom marauders of all kinds can be checked. But very often the disaster

is entirely due to natural causes, the growth of some obscure plant, or the poisoning of the water from some unknown source.

In France and Germany, the crawfish is considered a great delicacy and is often carefully preserved and sent to market. Since these lobster-like inhabitants of fresh-water streams are slow growers, they must be well grown before they can be introduced into ponds and streams where fish are of any size, otherwise they merely afford so much extra food for the fish. They also devour fish spawn and fry. Doubtless the European variety would flourish in most parts of the United States where the winter is not too severe and the summer not too hot.

In conclusion, I would like the attention of land and water owners, of railway magnates and handlers of fish called to the fact that, in Germany, fish in large quantities are brought from a distance alive in tanks by rail. The prices paid for live fish fully justify the expense. Should the farming of fish extend in some favored locality, it would pay railways to carry tanks or even build tank cars for the transportation of fish alive to the great centers of population, the water being kept in condition by some simple mechanism which drives air through it constantly. Much higher prices will be paid for fish arriving alive in our great city markets than for the freshest looking fish packed in ice.

CHARLES DE KAY,
Consul-General.

BERLIN, *April 19, 1895.*

DRY-DOCK TOLLS AT KINGSTON, CANADA.

I transmit herewith an order in council referring to dry-dock tolls at Kingston, Canada.

M. H. TWITCHELL,
Consul.

KINGSTON, *July 9, 1895.*

[Extract from a report of a committee of the privy council, approved June 15, 1895.]

On a report, dated May 31, 1895, from the Minister of Public Works, representing that requests have frequently been made for the reduction of the tariff of tolls established by the order in council of February 9, 1892, for the use of the Kingston dry dock, but that the Department of Public Works has always, up to the present time, declined to entertain the said requests. At the opening of this season, it has again been represented that the rates charged are too high, and that more vessels would use the dock were they considerably reduced, besides which the revenue would be materially increased.

The minister adds that, since the opening of the said dock in November, 1891, the revenue has been as follows: From November, 1891, to July 1, 1892, \$2,105.70; from July 1, 1892, to July 1, 1893, \$6,196.49; from July 1, 1893, to July 1, 1894, \$7,453.01. The minister is of the opinion that it would not be advisable to reduce the rate on vessels of small tonnage (say up to 200 tons), as the minimum rate of \$20 a day, now established, is barely sufficient to pay for the working expenses of the dock, but that above that tonnage a reduction might be made, as an experiment, for one year, of one-half the present rate.

The minister observes that the rates, at present established by section 13 of the regulations, are as follows:

"On vessels and steamers from 100 to 500 tons, dockage to be 20 cents per ton on the registered gross tonnage, and for all tonnage in excess of 500 tons, dockage to be 10 cents per ton upon the excess.

"Dockage on tugs and vessels of less than 100 tons to be \$20.

"Lay days in the dry dock to commence twenty-four hours after the dock is pumped out, and to be charged at the rate of 7 cents per ton per day and fractions of a day.

"In no case the charges for laying in dock to be less than \$20 per day."

The minister adds that the reduction would consist in raising the minimum tonnage at which a rate per ton is being charged for docking and lay days, from 100 to 200 tons, all vessels below the latter figure to be charged \$20 for dockage and \$20 per day; that from 200 to 500 tons the dockage would be 10 cents per ton instead of 20 cents as now levied; and in case of vessels in excess of 500 tons, 5 cents per ton for such excess instead of the present charge of 10 cents, and that for lay days, the charge would be $3\frac{1}{2}$ cents per ton instead of 7 cents according to the present rates, but in no case the charge for lay days to be less than \$20.

The minister therefore recommends that the first four paragraphs of section 13 of the regulations established by the order in council of February 9, 1892, above quoted, be, as an experiment for the present season, revoked, and the following regulations substituted therefor:

"On vessels and steamers from 200 to 500 tons, dockage to be 10 cents per ton on the registered gross tonnage, and for all tonnage in excess of 500 tons, dockage to be 5 cents per ton upon the excess.

"Dockage on tugs and vessels of less than 200 tons to be \$20.

"Lay days in the dry dock to commence twenty-four hours after the dock is pumped out, and to be charged at the rate of $3\frac{1}{2}$ cents per ton per day and fractions of a day.

"In no case the charge for laying in dock to be less than \$20 per day."

The minister further recommends that the aforesaid reduction do date from the 16th day of April, 1895.

CYCLE SHOW AT TURIN.

The Turin International Cycle Show opened May 4 and closed June 10. As soon as it became known that Milan was to have a cycle show this spring, Turin, which has always been the most prominent town in Italy for cycling, was not going to fall behind her rival, with whom she is in keenest competition for the lead in business, and quickly decided to have a show of her own, and that on a much larger scale than Milan.

It may be said that her efforts have been quite successful, financially and otherwise, and that the show, which opened on May 4, under the auspices of royalty, can be called in every way perfect. Both exhibitions, however, had the same defect of being held too late in the season. The beginning of the year, when new types are turned out, would certainly have been a more advantageous time.

A glance over the principal stands will show the results obtained.

(1) C. Casalegno, Turin, showed a very large assortment of raw stampings, and besides the different stages of the manufacture, many finished pieces, all very nicely done, especially the enameling, which, for a long time proved to be of great difficulty to Italian manufacturers, but which now has reached a satisfactory state. The two and three-wheelers of this firm are well known all over Italy.

(2) Francesco Dova, Turin, excels in the manner of nickel plating and gilding.

(3) Frankenburger & Ottenstein, Nuremberg, exhibit strongly built machines constructed like all German wheels, after the latest patterns; their "Road Racer" and "Lady's Safety" are most popular in this country.

(4) Fabbre & Gagliardi's (Turin) stand was almost crammed with all sorts of cycle accessories—a most complete exhibit.

(5) The "Small Arms Factory" at Steyer, Austria, showed a large number of "Swift Cycles" of the highest workmanship and latest pattern, every part being interchangeable, a merit which is appreciated by racing and cycling men. The "Road and Path Racer," fitted up with wooden rims, requires special mention.

(6) Rudge-Whitworth, Birmingham, England, had on its stand an assortment of the latest types of light roadsters, while the tricycles and tandems are machines of the highest finish.

(7) Crio & Marchand, Milan, displayed wheels, especially tandems, the perfection of which in construction causes it to be recognized as one of the best patterns in use at present.

(8) Société Générale des Cycles Gladiator—"Phœbus," of Paris, France, has been able to bring its machines in a very short time into prominence.

(9) The "Elswick Cycle" is represented by a few machines. The "Lady's Safety" deserves high praise, being designed on really beautiful lines.

(10) General attention was drawn to the exhibit of the Humber Company (also English), arranged on the model of the "Eiffel Tower," its prettiest wheel being named "Torre Eiffel."

(11) Bender & Martiny, Turin, make a splendid show of every kind of cycle accessories, with a large assortment of highly-finished pneumatics of excellent material, besides a large number of well-known "jointless rims," invented by Vernon Pugh.

(12) Pirelli & Co., Milan, show a number of types of their pneumatic tires, very popular with racing men.

(13) The Over Wheel Company, of Chicopee Falls, Mass., showed a large number of beautifully designed machines of somewhat different lines from the Europeans. These wheels are said to be of the best workmanship and finish, giving proof of American skill. The firm will undoubtedly hold its own against the first-class European houses.

Besides the above-mentioned, a large number of Italian and foreign-made machines are on exhibition, all interesting as examples of the latest patterns.

In conclusion, I can not omit saying a word about the frescoes and paintings ornamenting the interior of the exhibition building. They added not a little to the attractiveness of the place, showing picturesquely to what uses bicycles may be applied in centuries to come.

W. E. MANTIUS,
Commercial Agent.

TURIN, *June 13, 1895.*

No. 180—4.

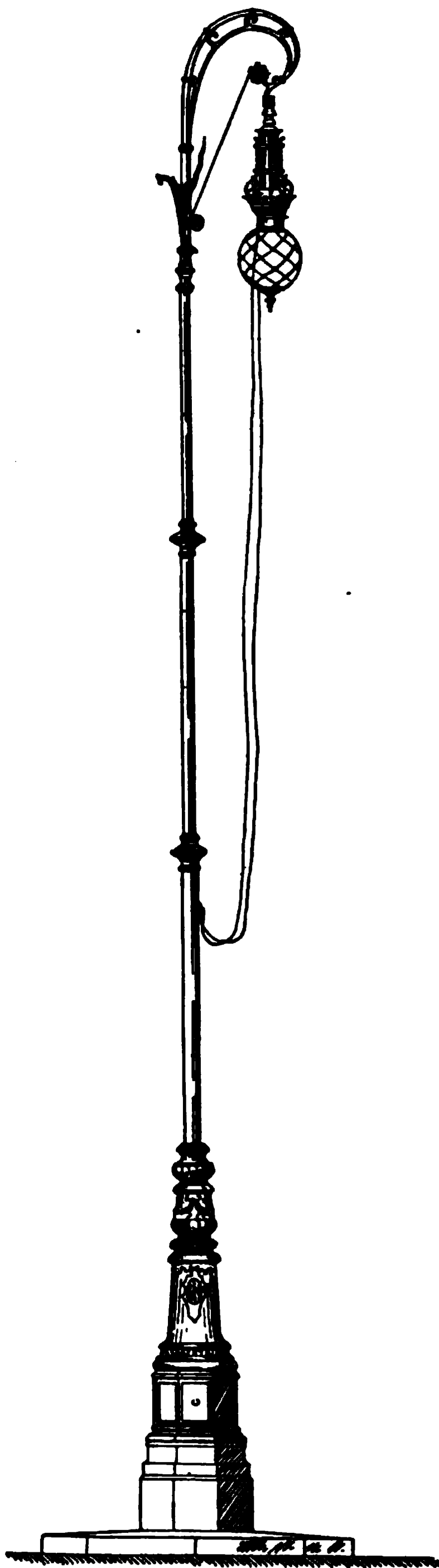
ELECTRIC LAMP-POSTS.

The general use of electricity as a means of illumination in our great cities must, in time, demand some other kind of support for the electric lamp than the unsightly wooden posts now so common. Especially is this need felt on our handsome thoroughfares, such, for instance, as the avenues in Washington. Here in Copenhagen, the question has been already taken up and solved, and there is now in practical use on Kongens Nytorv (Kings New Market), the principal public square of the city, a post for the electric lamp which is at once useful as well as ornamental. Herewith I give a photograph of the lamp-post as it appears in actual operation, and profiles of the different sections, with scale of measurement in feet and meters.* The lamp-post is cast hollow, the wires enter from the ground and leave the post as shown in the photograph, and the lamp is held in position by a weight resting on a spiral coil. The lamp is drawn down when required by catching the ring suspended from the lamp with a hook at the end of a light pole, with which the workman is provided. The wires can be carried into the lamp in any other way desired, but to reach the lamp through the hollow post is considered here the most practical. These posts, twelve in number, are very much admired, and furnish at once a solid and lasting support for the lamp and a very handsome ornament to the street or square.

ROBERT J. KIRK,
Consul.

COPENHAGEN, *June 6, 1895.*

* The profiles, etc., have been filed in the Bureau of Statistics, Department of State.



WOODING OF DUNES IN DENMARK AND BELGIUM.

Some time ago I was applied to by a gentleman living on the shores of Lake Michigan for a description of the methods and materials employed to control and overcome the shifting sands blown up from the sea on the west coast of Jutland. The plan generally followed in Denmark is to plant a belt of young trees (*Pinus montana* or *Pinus alba*) and then sow the sands both in front and behind this belt with the grass seeds known as *Arundo arenaria* or *Elymus arenarius*, using about 60 pounds per acre. Young trees can be had at a cost of about \$2 per thousand. The seed is generally ready for shipping in the month of October and costs about 20 cents per pound, bags not included. The trees should be planted and the seed sown in the fall or early spring. The *Elymus arenarius* seems to be more in demand for this purpose, as I am informed at the depot for seeds in Copenhagen. Another first-rate grass for shifting sands is the *Lathyrus maritimus*, which, besides fastening the sand, affords a nourishing and succulent food for cattle. This plant will also grow on poor and sandy soil situated far from the sea; it costs 40 cents per pound. Orders for these seeds should be placed not later than August, as they are not kept on hand in large quantities, and time must be given to procure them. They can be had from Markfrøkontoret Nysold bodgade, No. 7, Copenhagen. The same concern will, doubtless, fill an order for the young trees.

Below I append a translation of a letter of Mon. Vanderheyde, consul-general of Belgium, to his Government concerning the work accomplished in Jutland. I also give the results obtained on the coast of Belgium, with rules for prosecuting the work. Both these articles were published in l'Echo d'Ostende, October 15, 1893.

ROBERT J. KIRK,
Consul.

COPENHAGEN, May 11, 1895.

[Translated from l'Echo d'Ostende.]

In 1854, the western part of Jutland comprised about 9,090 kilometers* of land, mainly of turf and sand dunes, and presented the appearance of a vast desert where cultivation was rendered impossible not only on account of the poor soil, but also on account of the west wind, which prevailed there, so to speak, permanently. The Government, desirous of remedying this deplorable condition, decided to protect the district by raising plantations of trees, but the people, who, unfortunately, had no faith in the efficacy of this project, refused their assistance. Some years later, during which the administration actively continued the work along the coast, notwithstanding this incomprehensible opposition, a distinguished officer of the army, Lieutenant-Colonel Dalgas, resolved to form a philanthropic society for the purpose of encouraging the inhabitants of the section to surround their farms, their lands, and their dwellings with spruce or fir.

*5,648 miles.

It would be unnecessarily enlarging and also deviating from the object of my letter to enter into details regarding this undertaking so eminently patriotic, but, to give an idea of the importance of the results obtained during twenty-seven years by the persevering efforts of the Society for the Cultivation of Land, in conjunction with those of the Government, it will suffice to say that of 9,090 kilometers there is to-day left in Jutland only 3,977 kilometers of heath, turf, and sand surface, which, in the space of a quarter of a century, will be likewise, in great part, cultivated and covered with wood. On 25,000 tondelands* of land, which the State designated in the dunes of Jutland, there is planted, up to this time, 10,000 tondelands. The highest hills (dunes) have an elevation of from 30 to 33 meters.† The sides facing the sea have been wooded to a distance from the sea of from 2 to 300 meters. The nature of the soil is black quartzose. There is water in the damp places to a depth varying from 1 to 2 meters, and in winter, these are often inundated. On the hills, the bed of the superior black prevents a complete dryness, and thus also one finds, even during the driest season, the black soil humid to a depth of 2 to 3 centimeters. It will be seen from these statements that the condition of the soil is almost the same as in Clemskerke. I have always thought, however, that water is more abundant here.

The dunes situate on Skagerak are exposed to the winds of the northwest and southwest—winds particularly severe in this country.

The only materials employed are the *Pinus montana*, which is used in great quantities, and the *Pinus alba*. One makes use of the *Pinus montana* in the driest places—*i. e.*, on the west and south sides of the hill, and in the parts covered with heath; the *Pinus alba* is planted where the soil is sufficiently damp without being marshy. With these exceptions, there are not used on the dunes of Jutland any of the numerous species tried by us. The *Pinus austriaca*, which they have tried to acclimatize, could not survive, and experience has, it appears, sufficiently demonstrated that no other material is known which will last long enough here, because the young plant must not only be able to live in this arid soil, but it must also be able to grow there in a normal manner. The necessity of raising these young plants in the soil which is finally destined for them, is one of the first conditions of success in the cultivation of woods, and it was thus that they proceeded from the very start.

These nurseries are placed in the dunes farthest from the sea and protected by fences, hedges, and other guards, which, in certain places, reach a height of from 2.5 to 3 meters.

THE WORK ACCOMPLISHED ON THE BELGIAN COAST.

In the damp places advantageously situated there have been set out leaf-bearing plants (white auleas, black and white poplars, Canada poplars, etc.), and, in general, plants capable of spreading in a very light soil. On the parts raised, but situated back of the sand hills, there have been set out *Pinus sylvestris*, *austriaca*, *montana*, *corsica*, etc. They have in the same manner made trials of several species of *Sapins* (*epicea*, *normaniana*, etc.). Up to the present time these plants have been furnished in great part by the nurserymen in the environs of Bruges or from the Province d'Anvers. Experience, however, has demonstrated that they must have the nurseries in the sand dunes themselves. These nurseries have the advantages of furnishing acclimated plants and of being cheap. The creation of these nurseries is, according to the testimony of experts, an element of success in the wooding of the dunes. These nurseries remove the causes of deterioration to which the plants are exposed by reason of the long transportation which they must undergo from the nurseries in the interior of the country to the sand dunes themselves.

The work of wooding these dunes in a country as exposed as ours to the violent winds of the northwest, and to the desiccating winds of the east and northeast, especially in the spring time, has caused us to undergo a term of experiment which is now ended. There is every reason to hope that one will arrive at excellent results, if he will follow the advice of

* 1 tondeland=1.36 acres.

† 1 meter=39.37 inches.

M. Van de Castelle, the distinguished overseer of roads and bridges of Blankenburgh, under whose direction the wooding of our dunes has been pursued.

The following rules are prescribed by this excellent functionary :

(1) To protect the dunes next to the sea and the crests of the interior dunes against violent winds by plantations of osiers and of live hedges in argousier or thorns.

(2) Not to plant trees or copse in a zone of 500 to 600 meters in width from the dune next the sea.

(3) To create on this zone, in the places not too elevated above the water-bearing surface (or carœ), artificial prairies by means of sedimentation.

(4) To plant leaf bearers in the damp places situated behind the aforesaid zone and pines on the elevated parts.

(5) To protect as much as possible the plantations against the wind from the sea by means of obstacles of hedges, hurdles, etc.

(6) To submit the parts destined to be planted to a preparatory cultivation either of potatoes or rye, or lupine plant, and to fertilize these parts either by means of sedimentation or by the addition of manure (mud).

(7) To take the necessary precautions to protect the young plants against the action of the sun in summer and of the wind in the autumn and spring.

(8) Above all things, to raise in the dunes themselves or in close proximity to them, the plants destined to be used in creating the woods.

NEW TARIFF OF NEWFOUNDLAND.

I inclose a copy of the new tariff on imports enacted the present month. As the official act, although in force, may not be printed for a fortnight to come, the colonial secretary's office, at my request, furnished me with an accurate copy:

SAM RYAN,
Consul.

ST. JOHN'S, N. F., *June 26, 1895.*

RESOLUTIONS ON WAYS AND MEANS, SUBMITTED BY THE RECEIVER-GENERAL TO A COMMITTEE OF THE WHOLE HOUSE.

Resolved, That the several acts passed in the fifty-fourth, fifty-fifth, fifty-sixth, and fifty-seventh years of the reign of Her present Majesty, granting to Her Majesty certain duties on goods, wares, and merchandise imported into this colony and its dependencies be repealed: Provided always, that all bonds given and payments made under the said acts, or any of them, are hereby confirmed and declared valid, and nothing herein contained shall be construed to affect the same.

Resolved, That the following table of duties on goods, wares, and merchandise imported into this colony and its dependencies, as well as on local distillation and the table of exemptions, be enacted :

Table of duties.

Ale, porter, cider, and perry.....	per gallon...	\$0.35
Animals:		
Calves, pigs, and sheep.....	each...	.60
Horses, mares, etc.....	do.....	6.00
Apples.....	per barrel...	.60
Apples, dried.....	per pound...	.02
Bacon, hams, tongues, smoked beef, sausages.....	per cwt...	2.65

Beef, pigs' heads, pigs' tongues, feet, and hocks (salted and cured), per barrel of 200 pounds.....	\$1.05
Biscuit, known as ships' biscuit (not including sweet or [and] fancy biscuit or bread).....per cwt...	.20
Butter, oleomargarine, and other compounds representing butter.....do.....	3.00
Casks:	
Empty, second-hand, 45 gallons and under.....each...	.45
Empty, second-hand, over 45 gallons.....do.....	1.45
Cask staves:	
Second-hand, manufactured, capable of making casks of 45 gallons and upwards.....per 100...	5.75
Second-hand, manufactured, capable of making casks under 45 gallons...do.....	1.40
Cheese.....per cwt...	3.00
Chocolate and cocoa.....per pound...	.06
Cigars, 20 per cent ad valorem and \$9 per 1,000.	
Cigarettes, 30 per cent ad valorem and \$2 per 1,000.	
Coffee:	
Green.....per pound...	.05
Roasted or ground.....do.....	.07
Coal:	
Imported or brought into the ports of St. John's, Harbor Grace, and Carbon-ear.....per ton...	.30
Imported or brought into the ports of Placentia, provided duties shall not be levied on any greater quantity than 400 tons of coal imported annually into Placentia by any person or corporation for the purpose of railway operation.....per ton...	.25
Confectionery, not including confectioners' ornaments.....per cwt...	7.00
Feathers and feather beds.....per pound...	.07
Fish (codfish and haddock, save as hereinafter exempt).....per quintal of 112 lbs...	1.50
Flour.....per barrel...	.25
Fruit, dried (except dried apples), currants, raisins, etc.....per pound...	.03
Hay.....per ton of 2,240 pounds...	1.80
Herring barrels.....each...	.25
Indian corn.....per bushel of 57 pounds...	.06
Indian meal.....per barrel...	.25
Jams and preserves, 30 per cent ad valorem and 5 cents per pound.	
Lumber:	
1 inch thick, and so in proportion for any greater thickness.....per 1,000...	3.50
Grooved, tongued, or planed, 1 inch thick, and so in proportion for any greater thickness.....per 1,000...	5.00
Meat (fresh) and poultry.....per pound...	.01 ½
Molasses.....per gallon...	.07
Oats.....per bushel...	.05
Oatmeal.....per barrel of 200 pounds...	.30
Oil, kerosene.....per gallon...	.06
Pease.....per barrel...	.30
Pork.....per barrel of 200 pounds...	1.50
Salt, in bulk.....per ton...	.20
Shingles and laths.....per 1,000...	.60
Spirits:	
Brandy and other spirits not herein defined or enumerated, and not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	3.20

Spirits—Continued.

All other spirits of greater strength than 43 per cent, over proof shall be deemed to be undefined spirits, and be subject to duty accordingly.....per gallon...	\$3.20
Whisky, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	2.60
Gin, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	2.30
Rum, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	2.00
Cordials, shrub, and other spirits, being sweetened or mixed so that the degree of strength can not be ascertained.....per gallon...	2.20
Straw.....per ton of 2,240 pounds...	1.00
Sugars :	
First grade, viz, loaf, cut loaf, and cube.....per cwt...	5.00
Second grade, viz, bastard, crystalized, and granulated.....do.....	4.00
Third grade, viz, unrefined, brown, and straw.....do.....	3.50
Tea, 30 per cent ad valorem, and 5 cents per pound.	
Timber, including lignum-vitæ.....per ton...	.60
Tobacco :	
Manufactured, including leaf tobacco, stripped or partly manufactured, 5 per cent ad valorem, and 30 cents per pound.	
Leaf and stems.....per pound...	.30
Stems for snuff.....per cwt...	.60
Vegetables :	
Cabbages.....per 100...	2.00
Potatoes.....per bushel...	.05
Turnips, parsnips, carrots, and beets.....do.....	.10
Vinegar.....per gallon...	.15
Wines :	
Champagne.....do.....	4.20
Claret.....do.....	.55
Hock, Burgundy, and light Rhenish wines.....do.....	1.00
Malaga and Montilla, costing at port of shipment 80 cents a gallon, and any other above that price 12½ per cent ad valorem and \$1 per gallon.	
Malaga and Montilla, costing at port of shipment under 80 cents a gallon, per gallon.....	.35
Port and Madeira.....per gallon...	1.65
Sherry and Manzanilla, 12½ per cent ad valorem, and \$1 per gallon.	
Spanish red, Denia Sicilian, Figueira, red Lisbon Cape, and Lisbon common, per gallon.....	.35
All other wines, 15 per cent ad valorem, and \$1.10 per gallon.	

Ad valorem duties.

	Per cent.
Tallow, grease, palm oil, and eggs.....	7½
Anchors and chain cables, copper and composition metal for ships, including bars, bolts, sheathing, and nails of the same materials.....	10
Bread-bag brin, when imported direct by biscuit bakers for making bags to contain biscuit.....	10
Bookbinders' tools and implements, including ruling machines, leather, bookbinders' cloth, marble paper and paper board, imported direct by bookbinders, for use in their trade and not for sale.....	10
Brick.....	10
Canvas, sailcloth, and tarpaulin canvas for ships' use.....	10

	Per cent.
Cement.....	10
Corks and cork wood.....	10
Diving apparatus.....	10
Fishing tackle, except fishing tackle for anglers.....	10
Hoop iron, iron of all kinds, in bars, bolts, sheets, plates, and pieces, except as hereinafter exempt.....	10
Machinery and parts of machinery.....	10
Machinery belting of rubber, leather, or other material.....	10
Nails, wrought.....	10
Oakum (pitch and tar), resin, and raw turpentine.....	10
Oranges, lemons, grapes, nuts, limes, and olives and olive oil.....	10
Olein, beef oil, neutral lard stock, cotton-seed oil, sesame, and other oils, to be used in the manufacture of artificial butter.....	10
Plaster	10
Poultry, alive.....	10
Saws, used as a part of the original construction of mills and factories.....	10
Sewing and knitting machines and parts of same.....	10
Sheet and block tin and solder.....	10
Steam engines and boilers, propellers and water wheels.....	10
Worsted and woolen yarn of all kinds.....	10
Vegetables of all kinds, except those before mentioned in the table of duties.....	10
Bran, barley, malt, rice, and hops.....	12½
Mast pieces and spars, not manufactured.....	13½
Staves, undressed.....	12½
Medicines.....	20
Oxen, cows, and bulls.....	20
Cordage, viz, rope and hemp, coir and manillia cables.....	10
Dories and dory ores.....	25
Leather.....	25
Goods, wares, and merchandise, not otherwise enumerated, described or charged with duty, and not otherwise exempt.....	30
Saws.....	30
Blocks, cabinet wares, candles, carriages, wagons, sleighs, and harness.....	35
Nails and spikes of iron or steel :	
Cut.....	35
Pressed	35
Casks, in which dry goods are imported, when fit to hold liquid.....	35
Manufactures of wood, except musical instruments.....	35
Ready-made clothing, viz, coats, jackets, trousers, waistcoats, mantles, dresses, cloaks, and sacques.....	35
Stockings, shirts, and drawers, made by hand.....	35
Staves, manufactured and dressed, or partly dressed.....	40
Cans imported in a manufactured state for hermetically sealed goods, including the cases in which they are contained.....	40
Brooms and whisks, manufactured partly or wholly of corn.....	45
Biscuits (fancy) and sweetbread.....	30

Table of exemptions.

The following articles, imported into this colony and its dependencies, shall be exempt from payment of duties :

Agricultural implements and machinery imported by agricultural societies for the promotion of agriculture.

All live stock imported by agricultural societies for improving the breed of stock in this country.

Arms, clothing, and provisions for Her Majesty's land and sea forces.

Articles imported for religious purposes, not intended for sale.

Articles of every description imported for the use of the governor.

Articles for the official use of foreign consuls.

Articles imported for the use of the St. John's municipal council.

Artificial limbs.

Bait.

Bark for tanning leather.

Boiler and ship plates.

Ceresene, chloro di nitro bensole, nitrate of ammonia.

Chair cane, or reeds of whitrods, when imported in an unmanufactured state.

Coals, when not imported into the ports of St. John's, Harbor Grace, Carbonear, or Placentia.

Coin and bullion.

Corn for the manufacture of brooms.

Cotton yarn, cotton (raw), coke.

Cotton-seed oil, olive oil, boracic acid, acetic acid, and preservalene, when imported direct to be used in the preserving of fish or fish glue.

Cranes, derricks, fire clay and fire brick, rock drills, rolling mills, and separators when imported direct by parties engaged in mining and not for sale.

Crushing mills for mining purposes.

Donations of clothing especially imported for gratuitous distribution by any charitable society.

Dyestuffs.

Fish, of British catch and cure, and oil, the produce of such fish.

Fruit, not being canned, bottled, or preserved, and not otherwise enumerated.

Gas engines when protected by patent.

Hemp, hemp yarn, coir yarn, sisal, manilla, flax, and tow.

Herring-barrel hoop iron or hoop steel, splayed, punched, or nosed, and cut in lengths not to exceed 68 inches.

Hides or pieces of hides, not tanned, curried, or dressed.

Household furniture and working tools and implements used and in the use of persons arriving in this colony.

Junk, old iron, old copper, and old composition metal.

Manures of all kinds.

Materials for sheathing the bottoms of vessels, such as zinc, copper, and composition metal, together with nails and paper or felt which may be used for or under such sheathing, when used for sheathing the entire bottom of the vessel; provided that such materials, when warehoused or bonded, shall be marked with the name of the vessel to be sheathed and shall be used in sheathing such vessel and no other.

Music, written or printed.

Ores:

To be used in the manufacture of copper paint.

To be used as flux.

Oysters or clams, in shell.

Parchment or wax paper, when imported direct for wrapping boneless fish for export.

Passengers' baggage.

Patented machinery (for new industries in this colony) which can not be manufactured in this colony.

Pig iron, nail strips, whether iron, zinc, or brass, to be used in the manufacture of cut nails in this colony.

Plants, trees, and shrubs.

Plows, harrows, reaping, raking, plowing, mowing, stumping, potatoe, and seed-sowing machines to be used in this colony.

Printed books, pamphlets, newspapers, maps, and charts.

Printing paper, printing presses, printing types, and all other printing requisites.

Refuse rice, sand.

Scientific instruments and apparatus, including globes, when imported for the use of colleges and schools, and scientific or literary societies.

Seed for agricultural purposes.

Specimens illustrative of natural history.

Steel strips to be used in the manufacture of cut nails in this colony.

Sulphuric acid, when used in the manufacture of manures.

Twines to be used in manufacturing nets and netting in this colony.

Typewriting machines.

Unmanufactured wool.

Wheat.

Works of art, namely engravings, paintings, and statuary, not intended for sale.

Local distillation.

The following duties shall be raised, levied, and collected on the following articles distilled or brewed in this colony, namely :

Brandy, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	\$2.35
Whisky, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	1.85
Gin, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	1.75
Rum, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof.....per gallon...	1.50
Ale, porter, Bavarian beer, botanic beer, and all other small and dextrinous liquors, per gallon.....	.07

Resolved, There shall be a drawback allowed upon tobacco manufactured in this colony, when such tobacco shall be exported from this colony, at the rate of 21 cents per pound of such tobacco exported as aforesaid; provided that such drawback shall not be allowed upon any quantity of tobacco so exported at any one time less than 500 pounds. No drawback shall be allowed or payable on tobacco stems exported from this colony.

Resolved, There shall be allowed to any printer a drawback to the amount of any duties that may have been paid on any paper actually printed upon in this colony, upon the production of affidavits satisfactory to the receiver-general, setting forth the amount of duties which have been paid thereon, and that the said paper has been actually and bona fide printed upon in this colony.

Resolved, There shall be allowed a drawback upon biscuit manufactured in this colony from flour imported, on which duty has been paid at the customs, when such biscuit shall be exported from this colony, at the rate of 17 cents per cwt. of such biscuit exported as aforesaid; provided that such drawback shall not be allowed on any quantity of biscuit so exported at any one time less than 100 bags.

Resolved, Upon all ale, porter, Bavarian, or botanic beer manufactured in this colony, and upon which the duty hereinbefore imposed shall have been paid, and which may be exported from this colony, there shall be paid to the exporter thereof the sum of 7 cents per gallon by way of drawback, upon conformity with the provisions of 45 Victoria, chapter 6, section 61, as in the case of other drawbacks.

Resolved, There shall be a drawback allowed on all native berries and herring, and other edible fish, excepting lobsters and trout, packed in hermetically sealed cans, per 96 pounds exported; if packed in 1-pound cans, 20 cents per 96 pounds; if packed in 2-pound cans, 15 cents per 96 pounds; if packed in larger cans, 10 cents per 96 pounds.

Resolved, There shall be a drawback allowed on all native edible fish when packed in quarters or halves (sardine cans) of 35 cents per 100 pounds of fish exported.

Resolved, All duties and charges payable under these resolutions, and all exemptions thereby provided, and all drawbacks allowed, shall take effect on and after the 14th day of June, A. D. 1895.

Resolved, All sums of money payable under these resolutions as duties, penalties, or forfeitures shall be deemed and are hereby declared to be in dollars and cents, Newfoundland currency, and shall be received, taken, and paid in such currency; and all such duties shall be paid and received according to imperial weights and measures by law established in this colony; and in all such cases where such duties are imposed, according to any specific quantity or value, the same shall apply in like proportion to any greater or less quantity or value, and no reduction in the cost value of goods shall be allowed on account of what is usually termed cash discount.

Resolved, The several duties imposed and in the said table of duties mentioned in these resolutions shall be paid by the importer or importers of such articles, respectively, and shall be collected and secured by means of and under the regulations and penalties and in the manner provided by these resolutions, and by any act or acts of the general assembly of this colony for collecting the revenue of this colony and its dependencies.

Resolved, Wherever, under the provisions of these resolutions, a bond shall be taken in security for duties, interest at the rate of \$6 per cent per annum shall be payable on the sum thereby secured and shall be included in such bonds.

Resolved, The duty hereinbefore provided to be levied upon fish is subject to the following proviso, namely, provided that the governor may, by proclamation published in the Royal Gazette, remit, as he may deem equitable, the whole or any part of the duty imposed on fish imported into this colony or its dependencies from countries making such changes or reduction in their tariff with respect to fish, the produce of fish, or other articles exported from this colony or its dependencies to such countries.

Resolved, It shall not be lawful for any importer of dried fish to warehouse the same in any of the ports of this colony or its dependencies without the payment of the duty hereinbefore provided of \$1.50 on every quintal so warehoused, and the provisions of any act of this colony with regard to the warehousing of goods on the first entry thereof, or to the allowance of drawbacks upon exportation, shall not in either case apply, or be considered to apply, to such fish.

Resolved, In addition to the duties hereinbefore provided to be raised, levied, collected, and paid on goods, wares, and merchandise imported into this colony and its dependencies, there shall be raised, levied, collected, and paid on the goods, wares, and merchandise hereinafter in this section mentioned, imported into this colony and its dependencies from countries the fishermen of which have the privilege of taking codfish on all parts of the coast of Newfoundland and its dependencies, and in which countries duties are or hereafter shall be levied upon fish, or the produce of the fisheries, exported from this colony or its dependencies to such countries, the following rates, viz :

Flour.....	per barrel...	\$0.75
Pork.....	do.....	.75
Butter.....	per 100 pounds...	.75
Tobacco.....	do.....	5.00
Kerosene oil.....	per gallon...	.05
Corn meal.....	per barrel...	.25
Hay.....	per ton...	5.00

Oats.....	per bushel...	\$0.10
Potatoes.....	do.....	.25
Turnips.....	do.....	.25
Cabbage.....	per dozen heads...	.40
Unenumerated vegetables.....	30 per cent ad valorem.	

Provided always that the governor in council may, at any time when it shall be made to appear to him to be for the interest of this colony, by proclamation to be published in the Royal Gazette, suspend the operation of this clause for a limited period, the duration of such period to be stated in the said proclamation, in respect of all or any of the above-mentioned articles.

Resolved, When the duty on fish imported from this colony into Greece shall be reduced by 75 per cent, the duty upon currants imported into this colony shall be reduced by 75 per cent.

Resolved, In case of any country now imposing, or which may hereafter impose an import duty on herrings exported from this colony and imported into such country in vessels belonging to this colony, when such herring may be imported into such country in vessels belonging to the same free of such duty, the governor in council may by proclamation impose an export duty equal to the amount of duty so imposed by such country aforesaid on herring exported from this colony in vessels belonging to such country where such import duty is imposed.

Resolved, When it shall be made to appear to the governor in council that the duty on codfish, the product of this colony, imported into Spain does not exceed 5s. 6d. per quintal of 112 pounds, the governor may by proclamation, reduce the duty hereinbefore imposed on Spanish wines to the following rates :

On Malaga and Montilla, costing at port of shipment 80 cents a gallon, and any other above that price, 12½ per cent ad valorem and 40 cents per gallon.

Malaga and Montilla, costing at port of shipment under 80 cents a gallon, 14 cents per gallon.

Sherry, 12½ per cent ad valorem and 40 cents per gallon.

Spanish red, and all other Spanish wines, 14 cents per gallon.

Resolved, It shall be lawful for the receiver-general, the assistant collector of customs in St. John's, and the principal officer of customs in the outports, whenever he shall deem it expedient to do so, to examine upon oath any person passing entries for goods imported into this colony, or the importer himself, touching the subject-matter of such entries, or the purposes to which the articles imported are intended to be applied. Any person who, being so sworn, shall willfully make any false statement touching such entries, or the goods so imported, shall be held to be guilty of willful and corrupt perjury.

Resolved, All duties payable upon goods, wares, and merchandise, warehoused in any of the warehousing ports in this colony shall be payable in cash upon the removal of such goods, wares, and merchandise from the warehouse, and shall not be paid by bond as heretofore.

Resolved, It shall be the duty of all importers, and they are hereby required to furnish to the receiver-general, assistant or subcollector of customs, duplicate copies of all invoices of goods, wares, or merchandise imported by them at the time of passing entries therefor.

Resolved, It shall be lawful for the governor in council to direct the appropriation of the duties collected upon coal in the port of St. John's to the St. John's municipal council; and the duties collected upon coal in the port of Carbonear for the use of the water company of Carbonear; and the duties collected upon coal in the port of Placentia for the use of the water company of Placentia; and the duties collected upon coal in the port of Harbor Grace for the use of the water company and gas company of Harbor Grace, in the following amounts, namely, \$200 to the gas company to provide additional lights in the town of Harbor Grace and the remainder to the use of the water company.

Resolved, At the time of entering neat cattle, subject to an ad valorem duty by these resolutions, the importer or known agent thereof shall, at the time of such entry, pay a sum as duty to be calculated upon the valuation of \$25 for each of such cattle; provided, always, that within fourteen days after the landing of such cattle the said importer, or his authorized agent, shall, if in the meantime the same shall have been realized by public auction or private sale, produce the original account sales thereof, and answer all such questions respecting the same as the receiver-general, assistant collector, or other proper officer may propose, on oath (if required), who are hereby authorized to administer the same; and if, upon such examination, it shall appear to either of the said officers that the amount of value exceeds that for which the said cattle were first entered, the importer, or known agent, shall then pay by post entry the amount of duty that may exceed the original duty paid on the same; or, if the value should be less, the surplus duty received shall be returned by certificate of overentry to the said importer or known agent; and if such importer or known agent shall refuse to produce the account sales at the time aforesaid, or produce any other than the true account, or alter the same, or refuse to answer upon oath such questions as aforesaid, or to answer them truly, or to pay the additional duty (if any) due as aforesaid, such importer or known agent shall forfeit in any case aforesaid the sum of \$400; and should the said cattle not have been disposed of within the time aforesaid, or appraised as hereinafter provided, the duty already paid thereon shall be detained and deemed to be the true duty; provided, also, that one day's notice in writing of the time of the intended sale at auction, as aforesaid, be given to the receiver-general, assistant collector, or other proper officer; provided, further, that when the said cattle so imported are not intended for immediate sale, the duty payable thereon shall be ascertained at the time of landing by appraisement at their value in the place where imported, one appraiser to be appointed by the receiver-general, assistant collector, or other proper officer, as aforesaid, and one other by the importer or his authorized agent, and should the said parties disagree, they shall appoint a third appraiser, the appraisement of any two of whom shall be final and binding; and in the event of said importer or agent neglecting or refusing to appoint an appraiser at the time aforesaid, it shall be lawful for the receiver-general, assistant collector, or other proper officer, to appoint an appraiser to act for the said importer, by whose appraisement, with the other or others aforesaid, the said importer or agent shall be bound, and shall also be subject to the same regulations and penalties as hereinbefore provided; and the said importer or known agent shall at the time of entry aforesaid, deposit with the receiver-general, assistant collector, or other proper officer aforesaid, the sum of \$6 to meet the expenses of appraisement aforesaid, any part of which said sum unexpended shall be returned to the said importer or known agent.

Resolved, The receiver-general, assistant collector, or other proper officer, at the port where any vessel having on board cattle may arrive, shall, upon the application of the importer or importers thereof, permit the immediate landing of the same; provided that at the time of entry of such vessel, due entry of and payment of the duties herein imposed upon such cattle shall be made.

Resolved, The duty imposed upon neat cattle by these resolutions shall be levied, collected, and paid upon the proceeds of sale appearing upon the production of the original account sales, when such cattle shall have been sold, or upon the appraised value as hereinbefore provided, after deducting the amount of freight of any such cattle in either case.

[Here follow clauses fixing the compensation of customs officials.]

Resolved, That an act be introduced in accordance with these resolutions, which shall come into operation on the 14th day of June, now present, and continue in force until the 14th day of June, A. D. 1896.

NEW TARIFF OF BELGIUM.*

I have the honor to transmit herewith a printed copy and a translation of the new tariff bill ratified by the Belgian Senate on the 12th instant.

This tariff goes into force on July 24, 1895, excepting as to flour, oatmeal, and malt, for which it entered into effect on the 16th instant, and building timber, wood for joiners' and upholsterers' work, and wooden poles, for which it will go into force on January 1, 1896.

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *July 20, 1895.*

ARTICLE 1.

The Government is authorized to exempt sea vessels from lighthouse tax. This law is not applicable to vessels in destination or coming from Belgian ports where quay, port, or dock taxes collected for the benefit of the commune exceed 50 centimes (9.65 cents) in principal and an additional per ton net gauge. The withdrawal of the exemption will be, if there be occasion, pronounced by royal decree, which will take effect six months after its insertion in the *Moniteur Belge*.

ARTICLE 2.

The duties on merchandise indicated below are modified as follows:

Tariff number.	Tariff classification.	Unit.	Duty.	
Ex. 5	Timber for building and cabinetwork, other than oak and walnut:		<i>Francs.</i>	
	Rough and unsawed.....	Cubic meter.....	1.00	\$0.193
	Sawed.....	.....do.....	6.00	1.16
	Planed.....	.....do.....	9.00	1.74
	(Including squared timber, poles, and rough or unsawed wood less than 75 centimeters in circumference at the largest end. Rough or unsawed wood less than 1.25 meters in length, free, on condition that it be satisfactorily proved to the customs authorities that it is to be immediately sent for use in paper-pulp and wood-fiber manufactories.)			
7	Casks, mounted or knocked down.....	100 francs.....	10.00	1.93
	Cacao:			
	Bean, shell, and cacao butter.....	.....	Free.	.....
Ex. 13	Prepared.....	100 kilograms...	50.00	9.65
	Alimentary preserves:			
	Preserved in sugar.....	.....do.....	30.00	5.79
	(This category includes vegetables preserved in sugar, pastry, juice of fruits containing less than 8 per cent of alcohol, and all preparations, even not alimentary,			

* On May 14, Consul Roosevelt transmitted the then proposed tariff of Belgium. As there was much inquiry at the time on the part of United States exporters for information concerning the proposed changes, and, as it was thought that the bill would become a law in the form in which it was received from the consul, it was printed in *CONSULAR REPORTS* for July (No. 178), p. 479, under the heading "Present and Proposed Belgian Tariff," the old and the new tariff rates being given, side by side, for comparative purposes. Upon comparing the "proposed tariff," as published in *CONSULAR REPORTS* No. 178, with the tariff which has become a law, the changes were found to be so radical as to render the publication of the latter necessary.

Tariff number.	Tariff classification.	Unit.	Duty.	
Ex. 13	Alimentary preserves—Continued. made with sugar; biscuits, preserved fruits, sweetmeats, marmalades, jellies, and fruit pastes, containing at least 20 per cent and not more than 50 per cent of sugar. Products containing more than 50 per cent of sugar, such as macaroons, march-pane, meringues, and other sweet preparations containing no flour or farina, or which contain but a very small proportion, come under the head of refined sugar—sugar known as white powdered sugar and other similar products.) Other preserves.....	100 kilograms...	<i>Francs.</i> 12.00	\$2. 316
	(This category specially includes conserves and preparations in vinegar; fruit juice, without sugar, containing less than 8 per cent of alcohol; licorice juice; cheese, other than the common soft white cheese; biscuits, excepting sea biscuits and other preparations of pure flour which as bread are classed with alimentaries not specially tariffed; preserved fruits, marmalades, jellies, sweetmeats, and fruit pastes prepared without alcohol or sugar, or not containing more than 20 per cent of sugar.)			
Ex. 15	Butter, fresh and salted.....	.....do.....	20.00	3. 86
	Margarin and other artificial butters.....	.....do.....	20.00	3. 86
	(By margarin is understood all substances or preparations presenting an analogy to natural butter and which have not been manufactured exclusively of milk; by artificial butter is understood all comestible mixtures of fat—stearin, margarin, olein—and oil, such as artificial lard, mixtures of oleomargarine and oil, etc.)			
	Cream and milk intended for the manufacture of margarin and other artificial butters:			
	Cream.....	Hectoliter.....	10.00	1. 93
	Milk.....	.....do.....	2.00	. 386
	(Admission, duty free, of cream and milk, respectively, imported in quantities exceeding 10 and 50 liters shall be subordinate to proof and such measures as may be deemed necessary by the Minister of Finance to prevent fraud.)			
	Oats.....	100 kilograms...	3.00	. 579
	Flour:			
	Oatmeal .....	.....do.....	4.00	. 772
	Other (including semolina).....	.....do.....	2.00	. 386
	Malt.....	.....do.....	1. 50	. 289
	Alimentary pastes, (vermicelli, macaroni, Italian paste, etc.....	.....do.....	4.00	. 772
	Gingerbread.....	.....do.....	18.00	3. 474
	Honey.....	.....do.....	18.00	3. 474
	Conserves in boxes, earthen pots, crusts, or other similar packings (including the weight of the receptacles containing the merchandise; the importer is, however, allowed to claim for these receptacles the application of a legal tare of 15 per cent):			
	Game or poultry.....	100 kilograms...	30.00	5. 79
	Meats—			
	Simply cooked, smoked or salted.....	.....do.....	Free.	.....
	Otherwise prepared.....	100 kilograms...	15.00	2. 895
	Fish.....	.....do.....	15.00	2. 895
	Vegetables (preserved in boxes or bottles).....	.....do.....	15.00	2. 895
	Goose livers (pâtés de foie gras).....	.....do.....	60.00	11. 58
	(Including the weight of the receptacles containing the merchandise. The importer is, however, allowed to claim for these receptacles the application of a legal tare of 15 per cent.)			

Tariff number.	Tariff classification.	Unit.	Duty.	
			<i>Francs.</i>	
Ex. 20	Poultry (dressed).....	100 kilograms...	30.00	\$5. 79
	Saffron.....	.....do.....	500.00	96. 50
Ex. 22	Truffles.....	.....do.....	300.00	57. 90
	Cotton thread (single or twisted):			
	Unbleached and bleached, measuring per half kilogram—			
	20,000 meters of single thread or less.....	.....do.....	10.00	1. 93
	30,000 to 40,000 meters of single thread.....	.....do.....	15.00	2. 895
	40,000 to 65,000 meters of single thread.....	.....do.....	20.00	3. 86
	More than 65,000 meters of single thread.....	.....do.....	5. 90	. 965
	Colored or twisted, measuring per half kilogram—			
	20,000 meters of single thread or less.....	.....do.....	15.00	2. 895
	20,000 to 40,000 meters of single thread.....	.....do.....	20.00	3. 86
	40,000 to 65,000 meters of single thread.....	.....do.....	25.00	4. 825
	More than 65,000 meters of single thread.....	.....do.....	5.00	. 965
	Mixed with not more than 20 per cent of wool, cotton dominating the weight.	.....do.....	5.00	. 965
	Thread of goat, alpaca, llama, vicuna, and camel hair.....	.....do.....	5.00	. 965
	Worsted yarn:			
	Carded.....	.....do.....	5.00	. 965
	Combed—			
	Single:			
	Not colored.....	.....do.....	15.00	2. 895
	Colored.....	.....do.....	20.00	3. 86
	Twisted:			
	Not colored.....	.....do.....	20.00	3. 86
	Colored.....	.....do.....	25.00	4. 825
	Thread prepared for retail sale (this class comprises threads wound into balls, bobbins, small skeins, cards, or other kinds of mercery):			
	Cotton thread measuring more than 65,000 meters per half kilogram.	.....do.....	10.00	1. 93
	All other, excepting silk thread.....	100 francs.....	8.00	1. 544
Ex. 23	Fruits not specially tariffed:			
	Fresh—			
	Pineapples (including those preserved without alcohol or sugar, or containing not more than 20 per cent of sugar), and raisins (including crushed raisins and grape skins).	100 kilograms...	30.00	5. 79
	Other (including those preserved without alcohol or sugar, or containing not more than 20 per cent of sugar):			
	Imported in chests, boxes, jugs, baskets, and other packages weighing 3 kilograms or less.	.....do.....	30.00	5. 79
	Imported otherwise.....	.....do.....	12.00	2. 316
	Dried.....	100 francs.....	10.00	1. 93
24	Wearing apparel, underwear, and overgarments of all kinds (this class specially includes all articles of clothing and body linen, bed and table linen, made or partly made):			
	Collars and cuffs (linen).....	.....do.....	10.00	1. 93
	Underwear of all kinds—			
	Clothing for women:			
	Plain, without trimmings or embroidery.....	.....do.....	15.00	2. 895
	All other.....	.....do.....	20.00	3. 86
	Clothing for men:			
	Pure wool, or mixture of other materials, wool dominating the weight, and hats of all kinds for men.	.....do.....	10.00	1. 93
	All other.....	.....do.....	15.00	2. 895
Ex. 55	Hosiery (articles, made or partly made, not included among those indicated above).	.....do.....	15.00	2. 895
27	Musical instruments.....	.....do.....	10.00	1. 93

Tariff number.	Tariff classification.	Unit.	Duty.	
			Francs.	
33	Leather goods..... (Under this classification are included all articles made by leather workers, and of which the principal part is made of leather, morocco or other, such as portfolios, lawyers' portfolios, blotting books; surgeons' cases, not including surgical instruments; traveling cases or necessities, hand bags; traveling bags, small and medium sizes; albums, pocketbooks, desk portfolios, etc., comprised already in large part in the category of manufactured skins.)	100 francs.....	15. 00	\$2. 895
33	Mercery and hardware.....	.....do.....	15. 00	2. 895
	Perfumery :			
	With alcohol (unless the duty should be lower than that of other liquids containing alcohol).	.....do.....	15. 00	2. 895
	Without alcohol.....	.....do.....	15. 00	2. 895
Ex. 34	Old iron (scrap iron, cast iron, and steel).....		Free.	
	Pig iron.....	100 kilograms...	. 20	. 038
	Rough cast iron.....	.....do.....	. 30	. 057
	Rough and puddled iron.....	.....do.....	. 30	. 057
Ex. 34	Rough melted steel (cast steel rough rolled) :			
	Slabs and "blooms" (are considered as billets blooms less than 40 centimeters in circumference).	.....do.....	. 40	. 077
	Billets and largets (largets exceeding 1.25 meters in length are classed with steel in bars, sheets, or wire).	.....do.....	. 60	. 114
	Tin (tin-plated iron), not manufactured.....		Free.	
	Iron, copper, nickel, lead, or zinc plated (galvanized), not manufactured.	.....do.....	3. 00	. 579
36	Watches :			
	Gold cases.....	Piece.....	1. 50	. 289
	Cases of other metals.....	.....do.....	. 50	. 096
	Supplies for watches.....		Free.	
Ex. 40	Goat and sheepskins hard-tanned and kid hard-tawed.....		Free.	
Ex. 41	Slate for roofs.....	1,000 pieces.....	4. 00	. 772
Ex. 42	Tiles for pavements and every kind of construction :			
	Tiles and ceramic pavings in terra cotta or gray, single color..	100 kilograms...	1. 00	. 193
	Tiles in compressed cement, various colors.....	.....do.....	1. 50	. 289
	Tiles in delft or porcelain.....	.....do.....	10. 00	. 193
	Other.....		Free.	
	Glazed or enameled tiles and tiles for jointing (accessories included.)	.....do.....	. 50	. 096
45	Various industrial products (articles classed under the rubric of mercery and hardware, and necessary to the completion of other products may, in the interest of trade, be classed among various industrial products, in virtue of a decision by the Minister of Finance) :			
	Whalebone, cut or prepared (including artificial whalebone made of horn, etc.)	100 francs.....	5. 00	. 965
	Wooden spools for sewing thread for retail trade.....	.....do.....	5. 00	9. 65
	Finishings for artificial flowers, such as leaves, leather in bands, calyxes, stiff threads, pistils, ovaries, tubes in cloth and rubber, etc.	.....do.....	5. 00	. 965
46	Typographical products :			
	Books, newspapers, periodical publications, geographical and marine charts, engraved or printed music, prints, engravings, and artistic lithographic printing.		Free.	
	Other (principally including all kinds of printing—typographic impressions, photo-typographic, lithographic, chromographic, photo-lithographic, zincographic, or other reproductions of designs or engravings, on wood, on metal, or stone, not specially mentioned; the Government has power to convert the duty into equivalent specific duty.)	100 francs.....	15. 00	2. 895

Tariff number.	Tariff classification.	Unit.	Duty.	
			<i>Francs.</i>	
Ex. 50	Perfumed soaps (or toilet soaps).....	100 francs.....	12.00	\$2.316
Ex. 55	Hand embroideries (piece embroidery or remnants are not classed among clothing, underwear, or over-garments of all kinds.)	.....do.....	20.00	3.86
Ex. 55	Cotton tissues, plain, twilled, and drill, presenting in a square of 5 millimeters of the margin : Unbleached— First class (weighing 15 kilograms and more per 100 square meters): 27 threads and less..... 28 threads to 35 threads..... 36 threads to 43 threads..... 44 threads and more..... Second class (weighing from 11 to 15 kilograms, exclusively, per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 to 43 threads..... 44 threads and more..... Third class (weighing from 7 to 15 kilograms, exclusively, per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 to 43 threads..... 44 threads and more..... Fourth class (weighing from 3 to 7 kilograms, exclusively, per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 threads and more..... Bleached— First class (weighing 15 kilograms and more per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 to 43 threads..... 44 threads and more..... Second class (weighing from 11 to 15 kilograms, exclusively, per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 to 43 threads..... 44 threads and more..... Third class (weighing from 7 to 11 kilograms, exclusively, per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 to 43 threads..... 44 threads and more..... Fourth class (weighing from 3 to 7 kilograms, exclusively, per 100 square meters): 27 threads and less..... 28 to 35 threads..... 36 threads and more..... Dyed or printed (tissues manufactured completely or in part with dyed threads pay a duty of 5 francs per 100 kilograms over and above the duty herein mentioned)— First class (weighing 15 kilograms and more per 100 square meters): 27 threads and less..... 28 to 35 threads.....	100 kilograms... .....do..... .....do..... .....do..... do..... .....do..... .....do..... .....do..... do..... .....do..... .....do..... .....do..... do..... .....do..... .....do..... .....do..... do..... .....do..... .....do..... .....do..... do..... .....do..... .....do..... .....do..... do..... .....do..... .....do..... .....do.....	35.00 40.00 55.00 65.00 40.00 50.00 60.00 70.00 50.00 60.00 80.00 100.00 70.00 90.00 100.00 40.00 46.00 63.00 75.00 46.00 57.50 69.00 80.50 57.50 69.00 92.00 115.00 80.50 103.50 115.00 55.00 60.00	6.755 7.72 10.615 12.545 7.72 9.65 11.58 13.51 9.65 11.58 15.44 19.30 13.51 17.37 19.30 7.72 8.918 12.159 14.475 8.918 11.097 13.317 15.44 11.097 13.317 17.756 22.195 15.44 19.975 22.195 10.615 11.58

The reductions resulting from the present article are only applicable to merchandise coming from countries which accord to Belgian merchandise the treatment of most-favored nations, or who have commercial relations with Belgium. This will hold good with reductions of duties established by the law of January 30, 1892, approving the commercial treaty concluded December 6, 1891, between Belgium on the one part and Germany, Austria, and Hungary on the other part.

ARTICLE 3.

SEC. 1. There may be collected a special duty on alimentary products, of which similar indigenous products are subjected by special laws and regulations relative to falsification.

SEC. 2. The Government will determine the amount of this duty, which will not exceed the cost of verification and analysis

SEC. 3. It is authorized to prohibit the entry of products mentioned in section 1, if they do not fill the conditions exacted for the sale of similar products made or prepared in the country.

ARTICLE 4.

Article 40 of the law of March 4, 1846, is modified as follows: The Government is authorized to permit, under bond for duties, the temporary removal, in partial or total exemption of duties, merchandise destined to receive workmanship in the Kingdom.

ARTICLE 5.

Upon the manufacture of margarin and other artificial butters there is fixed an excise tax of 5 francs (\$0.965) per 100 kilograms (220 pounds). There may be accorded the discharge of the excise tax on exportation.

ARTICLE 6.

Any person owning a factory for the manufacture of margarin or other artificial butters, or vessels or utensils forming a complete appliance serving to manufacture margarin or artificial butters, is compelled to make a declaration at the office of the receiver of excise taxes of the province. Owners of manufactories of oleomargarine or melters of suets must submit to the same formality.

ARTICLE 7.

Manufacturers described in the preceding article are obliged to facilitate the administration agents in the exercise of their functions. They must furnish the agents with means of ascertaining the quantity of raw materials utilized and the amount obtained, and permit them to take necessary samples. They are, besides, obliged to prove the origin of the raw material.

ARTICLE 8.

SEC. 1. The Government is authorized to regulate the collection and discharge of the excise tax, and to determine the regime of inspection of melting houses (for tallow).

SEC. 2. The decrees taken in virtue of the preceding disposition will be submitted to the legislative chambers.

ARTICLE 9.

SEC. 1. All stratagem having the aim or effect to remove matter subject to an excise tax, is punished by a fine of 2,000 francs (\$386).

SEC. 2. All manufacture of margarin or artificial butter effected without declaration, otherwise than in vessels designed for this usage in the declaration of work, is punished by a fine of 5,000 francs (\$965).

SEC. 3. Independently of the confiscation of the utensils, and of an imprisonment of from three months to two years, the fine mentioned in the preceding paragraph is doubled when the facts transpire in a clandestine manufactory, or if it is a question of a manufactory legally established elsewhere than in the locality where the vessels described in the declaration of business are found.

SEC. 4. If a manufacturer of margarin or artificial butter works without having paid or guarantied the duties, or if he is committed for infraction of a fact coming under the application of one or the other of paragraphs 2 and 3 of the present article, the Government may, if it judges necessary for the security of the duties due and fines incurred, seize and have taken away, in virtue of an injunction of the president of the tribunal, all the vessels and utensils in the factory.

SEC. 5. Other infringements of articles 5 to 7 of the present law, as well as infringements of decrees taken in virtue of article 8, are punished by a fine of 1,000 francs (\$193).

SEC. 6. Independent of penalties mentioned in the present article, the payment of duty frauds is always exacted.

ARTICLE 10.

The Government will fix by royal decision the date on which the various provisions of the present law will enter into effect.

WAGES AND FOOD PRICES IN AUSTRALIA.

Unlike the countries of Europe, whose populations are condensed into the smallest possible area, Australia with her thousands of acres of unimproved land presents a field for the farmer and mechanic which can not be surpassed in the civilized world. Nearly all the agricultural products which are cultivated in the United States are raised in these colonies, but the chief source of wealth is from minerals, pastoral products, and the vine. The general depression, however, which has prevailed throughout the world during the past three years, has been felt most severely in these colonies, and all branches of industry are realizing a degree of stagnation never before experienced in the history of the country. This depression has, perhaps, been stimulated in the colony of Victoria on account of the reaction from the "land boom" of 1887-'88, at which time the value of real estate was forced up to a price four or five times the actual value, and when the natural reaction set in, the price of land of course fell far below its intrinsic worth, which brought ruin not only to capitalists but to many workingmen, who lost not only their situations but their homes, which they were compelled to mortgage in order to provide for the necessities of life. Many were induced to pledge themselves to fabulous liabilities and were ultimately left stranded; some fled the country, and a large number committed suicide; others made a private composition, and it is recorded that in the month of November, 1893, prominent citizens of Melbourne with liabilities aggregating £2,200,000 (\$10,706,300) compromised at the rate of 2d. (4 cents) in the pound (\$4.866). Many other private compositions were effected, of which no record has been made. At the present time, large sums are locked up in safe deposit vaults, and the money is, of course, taken out of circulation. To add to the depression, five of the colonial banks of Victoria in 1893 suspended payment and withdrew from circulation £30,300,000 (\$147,454,950) of the floating capital of the people.

The general stagnation in business has resulted in throwing many of the laborers entirely out of work and entailing upon others much suffering, and

the present condition of the majority of the industrial class in the colony of Victoria is indeed deplorable. A complete paralysis has come over the building and iron trades, and thousands of men who were in receipt of good wages a few years ago are, at the present time, obtaining the necessities of life with the greatest difficulty. Earnings at the present time are reduced to a mere nominal sum, and skilled white artisans are glad to accept any employment they can obtain. One hopeful aspect of the case is that the natural products of the colony are increasing in quantity and improving in quality. In 1894, wool, wheat, furs, butter, frozen meat, wine, and many other articles of export showed a marked improvement over previous years, and although the low prices obtained in England for these products were a source of disappointment to the producers, yet with the large output and the use of modern machinery, they were compensated for the falling off in price. Nearly £3,000,000 (\$14,599,500) worth of gold and £500,000 (\$2,433,250) worth of coal were taken from the Victorian mines in 1894. There are hundreds of thousands of acres of good virgin soil awaiting cultivation, and a large area pronounced by geological experts to be of an auriferous character and well worth working.

RATES OF WAGES.

It is almost impossible to give anything like an accurate statement of the rates of wages paid during the past two years. I append a statement taken from Hayter's Victorian Year Book for 1893.

Wages in Melbourne.

Occupation.	Wages.	Occupation.	Wages.
<i>Domestic servants.</i>		<i>Station (sheep ranch) servants—</i>	
Males (with board and lodging),		Continued.	
per week.....	\$4.86 to \$9.73	Males (with lodgings and ra-	
Females (with board and lodging):		tions)—Continued.	
Cooks.....per year..	194.66 to 340.65	Drovers (with rations), per	
General servants.....do...	97.33 to 194.66	week.....	\$6.07 to \$9.73
<i>Hotel servants.</i>		Sheep washers (with ra-	
Males (with board and lodging):		tions), per week.....	3.65 to 6.07
Barmen.....per week..	7.29 to 9.73	Shearers (with rations), per	
Waiters.....do...	6.07 to 9.73	100 sheep shorn.....	3.65 to 3.89
Cooks.....do...	4.86 to 14.60	Female cooks (with board and	
Females (with board and lodging):		lodging), per annum.....	145.99 to 291.99
Barmaids.....per week..	3.65 to 6.07	<i>Workers in books, etc.</i>	
Waitresses.....do...	3.65 to 4.86	Printers:	
Housemaids.....per annum..	146.00 to 194.66	Compositors.....per 1,000..	.26
Cooks.....do...	243.32 to 486.65	Compositors.....per week..	13.62 to 24.33
<i>Station (sheep ranch) servants.</i>		Machinists.....do...	9.73 to 17.03
Males (with lodgings and rations):		Lithographers.....do...	9.73 to 17.03
Boundary riders...per annum..	194.66 to 291.99	Binders.....do...	13.62 to 19.46
Shepherds.....do...	175.19 to 248.19	Paper rulers.....do...	12.62 to 19.46
Stockmen.....do...	243.32 to 291.99	Sewers and folders (females)..do...	3.65 to 6.68
Cooks.....do...	291.99 to 340.65	<i>Jewelers, etc.</i>	
Laborers (with rations), per		Watchmakers.....per week..	9.73 to 21.89
week.....	3.65 to 4.86	Manufacturing jewelers.....do...	8.51 to 12.16

Wages in Melbourne.

Occupation.	Wages.		Occupation.	Wages	
<i>Workers in metals.</i>			<i>Dress.</i>		
Blacksmiths.....per day..	\$2. 19	to \$2. 67	Tailors.....per hour..	\$0. 20	to \$0. 24
Farriers :			Do.....per week..	9. 73	to 17. 02
Firemen.....per week..	10. 21	to 17. 02	Mantle makers.....do...	3. 16	to 7. 29
Floormen.....do...	9. 73	to 10. 21	Milliners :		
Hammermen.....per day..	1. 70	to 1. 94	First class.....do...	14. 59	to 19. 96
Fitters.....do...	1. 94	to 2. 92	Second class.....do...	3. 65	to 10. 94
Turners.....do...	2. 19	to 2. 67	Dressmakers.....do...	2. 92	to 10. 94
Boiler makers and platers.....do...	2. 43	to 2. 67	Needlewomen.....do...	2. 92	to 10. 94
Riveters.....do...	2. 43	to 2. 67	Bootmakers :		
Molders.....do...	2. 43	to 2. 79	Riveting children's boots,		
Brass finishers(coppersmiths).....do...	2. 43	to 2. 92	per pair.....		. 10
Tinsmiths.....per week..	11. 67	to 13. 13	Riveting boys' boots, per		
Ironworkers.....do...	9. 73	to 16. 05	pair.....	. 15	to . 19
Galvanizers.....do...	9. 73	to 16. 05	Riveting women's boots,		
Plumbers (gas fitters).....do...	12. 16	to 14. 60	per pair.....	. 16	to . 26
<i>Carriage and harness makers.</i>			Riveting men's boots, per		
Smiths.....per week..	12. 16	to 14. 60	pair.....	. 24	to . 42
Body makers.....do...	8. 51	to 12. 16	Machinists.....per week..	2. 43	to 6. 07
Wheelers.....do...	9. 73	to 11. 67	Hatters :		
Painters.....per day..	1. 58	to 2. 43	Body makers.....per dozen..	2. 43	to 5. 34
Trimmers.....per week..	10. 94	to 17. 02	Finishers.....do...	2. 92	to 5. 84
Vicemen.....do...	8. 51	to 9. 73	Shapers.....do...	. 97	to 2. 92
Saddlers.....do...	9. 73	to 19. 46	Crown sewers.....do...	. 85	to 1. 09
<i>Workers in ships and boats.</i>			Trimmers.....do...	1. 46	to 2. 19
Sailors :			Clothing factories :		
Sailing vessels per month and			Tailoresses.....per week..	4. 86	to 7. 29
found.....	14. 59	to 19. 46	Pressers.....do...	8. 51	to 13. 38
Steamships per month and			Shirt makers.....do...	2. 92	to 6. 07
found.....		34. 06	<i>Food and drink.</i>		
Ship carpenters (shipwrights), per			Bakers :		
month and found.....	38. 93	to 48. 66	Foremen.....per week..	10. 94	to 12. 16
Cooks.....per month and found..	19. 46	to 58. 40	Second hands.....do...	10. 94	to 12. 16
Stewards.....do...	19. 46	to 58. 40	Butchers :		
Engineers.....do...	72. 99	to 120. 66	Shopmen.....do...	10. 94	to 12. 16
Firemen.....do...		43. 80	Slaughtermen.....do...	12. 16	to 17. 03
Trimmers.....do...		34. 06	Boys (with board).....do...	4. 86	to 7. 90
Stevedores' men (lumpers), per			Small-goods men (with board),		
day.....		2. 92	per week.....	7. 29	to 12. 16
<i>House and building trades.</i>			Malsters (with board).....per week..	10. 21	to 13. 38
Masons.....per day..	2. 43	to 2. 67	<i>Animal substances.</i>		
Plasterers.....do...	2. 43	to 2. 67	Curriers.....per week..	12. 16	to 17. 03
Bricklayers.....do...	2. 19	to 2. 43	Tanners.....do...	8. 75	to 9. 73
Slaters.....do...	2. 43	to 2. 67	Beamsmen.....do...	9. 24	to 10. 94
Carpenters.....do...	2. 19	to 2. 43	Sheds men.....do...	9. 24	to 10. 94
Laborers.....do...	1. 46	to 1. 70	Fellmongers.....do...	7. 29	to 10. 94
Painters and glaziers.....do...	1. 70	to 2. 43	<i>Stone, clay, etc.</i>		
<i>Furniture, etc.</i>			Brickmakers.....per 1,000..	3. 40	to 3. 65
Cabinetmakers.....per week..	9. 73	to 14. 50	Navvies.....per day..	1. 58	to 1. 94
Upholsterers.....do...	10. 94	to 15. 32	Quarrymen.....do...	1. 70	to 2. 67
Polishers.....do...	9. 73	to 12. 16	Stonebreakers.....per cubic yard..	. 48	to . 96
Coopers.....per day..	2. 19	to 2. 43			

The foregoing prices for wages is the scale adopted by the Trades and Labor Council, but owing to the great depression which exists at the present time in all branches of trade, workmen are glad to accept work at almost any price, which makes it impossible to give anything like an accurate scale of the present ruling wages for any particular trade.

Agricultural labor.—Notwithstanding that wages in the centers of population have been so seriously reduced in all the mechanical industries, the wages paid to agricultural laborers show but a slight falling off. I append a table showing the present rates paid. Rations are allowed in all cases in addition to the wages quoted except in the case of thrashers, hop pickers, and corn pickers:

Occupation.	Wages.	Occupation.	Wages.
Plowmen.....per week..	\$4.86 to \$7.07	Thrashers.....per bushel..	\$0.10 to \$0.14
Farm laborers.....do...	3.65 to 4.86	Hop pickers.....do....	0.12
Milkmen (for dairies).....do...	3.65 to 4.86	Corn pickers.....per bag..	.10
Cheese makers.....do...	6.07 to 9.73	Machine labor:	
Reapers.....per acre..	2.43 to 3.65	Reaping per acre—	
Mowers.....do...	.97 to 1.46	With binding.....	1.68
Cooks.....per annum..	243.32 to 291.99	Without binding.....	1.09
Females:		Thrashing 100 bushels—	
Dairymaids.....per week..	2.71	With winnowing.....	4.29
Others.....do...	2.55	Without winnowing.....	3.48

The foregoing figures have been obtained from the returns of the collectors in all the districts.

TRADES UNIONS.

In 1890, there were ninety-four separate unions affiliated with the Trades' Hall, which were all in a most flourishing condition, as there was enough work to keep artisans constantly employed, but owing to the reaction, on account of the land boom and other causes, the present depression has reduced this number by twenty-five or thirty, the strongest of these being the typographical and bootmakers' unions, but as business improves it is expected that a number of the extinct unions will be reorganized and that additional ones will spring into life. These unions have in the past almost controlled the labor market, through the Trades' Hall, which was organized in 1855, when they received a crown grant of land. This is a legislative body to which the various unions send representatives.

EMPLOYERS' UNIONS.

Owing to what the employers termed the aggressive disposition of the workingmen's unions, the several employers of labor held a conference in Melbourne on the 6th of November, 1889, at which meeting it was proposed that—

(1) Each trade in each colony to form a union in itself, and from their body select delegates who will represent them upon their executives.

(2) The executives to have full power to settle all disputes brought before them.

(3) The executive of each colony to appoint delegates to represent them on a federal council, which shall have full power over all.

(4) The subscription by each member to be sufficient only to amply cover the working expenses of their executive.

(5) To have one head office and one secretary in each colony, and all meetings connected with the employers' unions to be held there free of cost, including the services of the secretary.

The outcome of this conference was the formation of what is known as the Employers' Union, the objects of which are: (a) To secure to its members all the advantages of unanimity of action; (b) to protect the interests of all classes of employers in their dealings with labor organizations; (c) to arrange for mediation or arbitration in trade disputes; (d) to take such steps as may from time to time be decreed expedient to protect the interests of its members and affiliated bodies.

At the present time, the employers insist on freedom of contract, and do not recognize the labor unions. All employees are selected on account of their individual fitness for the work required.

HOURS OF LABOR.

Eight hours is recognized as a day's work by both employers and workmen in all the principal trades.

AUSTRALIAN WORKMEN.

Socially, the better class of artisans are, generally speaking, well informed and men of superior education; and as the majority of them have traveled through the colonies, and in many instances have come from England or the continent of Europe, they are more cosmopolitan, and consequently more liberal in their views than the English or Continental workman whose experience is limited to the confines of his native town.

THE MARITIME STRIKE.

One of the causes which led to the present depression was the great maritime strike of 1890. This was brought about by the employers insisting on their right to engage men independent of the trades unions, and the determination on the part of the unionists to resist what they considered an encroachment on their rights. The strike lasted from the 14th of August until the 13th of November, with the result that the men were compelled to return to work on the terms dictated by the employers. Since that time, a workman is not asked whether he belongs to one of the unions or not, and union men and free laborers now work side by side in the same factory.

PRESENT CONDITION OF LABORERS.

The present condition of the Australian workman is indicated by the fact that, outside of those who are employed by the Government on public works,

fully 60 per cent are unemployed, and a large proportion of the remainder only partially employed, and during the past two years, it has been rather the exception for the artisan or mechanic to earn a week's wage at his own legitimate trade. Such has been the deplorable condition of affairs that, within the last three years, nearly one hundred thousand desirable colonists have left Victoria, and, in the majority of cases, greatly against their inclination, have gone to the United Kingdom, South Africa, the United States, Canada, New Zealand, West Australia, or to some of the adjacent colonies, and have taken a large amount of capital and energy with them to their new homes.

COST OF LIVING.

The following are Melbourne prices. In the country districts, the cost of groceries, tobacco, and coal is naturally somewhat higher and agricultural products somewhat lower:

Articles.	Price.	Articles.	Price.
<i>Agricultural produce.</i>		<i>Farmyard produce—Continued.</i>	
Wheat.....per bushel..	\$0. 50	Ham.....per pound..	\$0. 22
Barley :		Eggs.....per dozen..	. 24
Malting.....do...	. 73	<i>Garden produce.</i>	
Cape.....do...	. 34	Potatoes.....per ton..	9. 73
Oats.....do...	\$0. 32 to . 36	Onions.....per bushel..	. 66
Corn.....do...	. 40 to . 42	Carrots..... per dozen bunches..	\$0. 12 to . 24
Hay.....per ton..	14. 59	Turnips.....do...	. 12 to . 30
Flour.....do...	27. 98	Radishes.....do...	. 08 to . 10
Bread .....per 4-pound loaf..	. 10 to . 12	Cabbages.....per dozen..	. 20 to . 74
<i>Grazing produce.</i>		Cauliflowers.....do...	. 23 to 1.00
Cattle .....each..	23. 12 to 41. 97	Lettuce.....do...	. 12 to . 24
Fat.....do...	29. 20 to 55. 53	Green pease.....per pound..	. 02
Milch cows.....do...	14. 59 to 38. 93	<i>Miscellaneous articles.</i>	
Sheep (fat).....do...	2. 10 to 2. 55	Tea.....per pound..	. 20 to 1. 50
Butchers' meat :		Coffee.....do...	. 36
Beef.....retail per pound..	. 08 to . 16	Sugar.....do...	. 04 to . 06
Mutton.....do...	. 04 to . 10	Rice.....do...	. 05 to . 08
Veal.....do...	. 08 to . 16	Tobacco.....do...	1. 21
Pork.....do...	. 06 to . 16	Soap (colonial).....per pound..	. 04 to . 08
Lamb.....per quarter..	. 36	Candles (sperni).....do...	. 10 to . 16
Dairy produce :		Salt.....do...	. 01 to . 02
Butter.....per pound..	. 16 to . 24	Coal.....per ton..	3. 89 to 5. 34
Cheese.....do...	. 08 to . 24	Firewood.....do...	2. 31 to 3. 04
Milk.....per quart..	. 06	<i>Wines, spirits, etc</i>	
<i>Farmyard produce.</i>		Ale :	
Geese.....per pair..	. 97 to 1. 20	Imported.....per dozen..	2. 31 to 2. 92
Ducks.....do...	. 85	Colonial.....do...	1. 25 to 1. 65
Fowls.....do...	. 75	Stout :	
Rabbits.....do...	. 24	Imported .....do...	2. 31 to 2. 92
Pigeons.....do...	. 24 to . 48	Colonial .....do...	1. 33
Turkeys.....each..	1. 53	Brandy.....per gallon..	5. 10 to 8. 21
Hares.....do...	. 24 to . 36	Colonial wine.....per dozen..	2. 92 to 9. 73
Bacon.....per pound..	. 16	Do.....per gallon..	. 34 to 1. 00

By the preceding list of prices, it will be seen that the cost of living is as low as in any part of the civilized world.

Owing to the excessive immigration from this colony during the past two years, and the consequent reduction in the population, houses can be rented here for a mere nominal sum, but with the revival of business, rents must advance to a price which will at least pay a fair interest on the money invested.

STATE BANK.

The question of establishing a state bank is looked upon with favor by many of the leading citizens in the colony, and a royal commission has been appointed to devise the best method of establishing such an institution.

With the increased export of dairy and other produce, and the large output from the mines of the colony, it is to be hoped that business will revive and that prosperity will attend the efforts of both the mechanic and manufacturer.

ACKNOWLEDGMENTS.

I desire to acknowledge my obligations to Mr. John Hancock, M. P., secretary of the Typographical Union, and to Mr. Charles Hudson, secretary of the Employers' Union, for the courtesies extended and information furnished me in connection with this report.

DANIEL W. MARATTA,
Consul-General.

MELBOURNE, *March 6, 1895.*

WAGES IN SWITZERLAND.

COTTON AND SILK INDUSTRIES.

Dr. Schuler, the federal factory inspector, and his assistant, Dr. Wegmann, have during late years made extensive investigations of the question of wages, as paid by the industries in the northeastern part of Switzerland, and have compiled very valuable statistical material. These are the first wage statistics on a great scale compiled in Switzerland, and it is difficult to find the same careful, impartial, and judicious treatment of the matter elsewhere. Only the most important features are reproduced here.

Beginning with the textile industries, they first took up the cotton industry, starting with the cotton-spinning establishments. Wages in this branch are low, which is due to the sharp world competition, and to the fact that cotton mills are the refuge for a great number of people who are unfit for other occupations, owing to mental or physical disabilities, but who are able to earn a living at this industry. Even the farmers, most of whom look with disdain upon occupations in cotton mills, send members of their families physically unable to perform farm labor to these factories. The mechanic or tradesman, also finding no suitable occupation for some of his children at his own shop, sends them thither. Taking moreover into consideration that the bulk of laborers in spinning mills, *i. e.*, 58.6 per cent

according to Swiss statistics, are either children or females, it becomes evident that high wages are not expected in this particular line.

The impossibility of paying high wages, and the desire to utilize cheap motive power, have induced industrial concerns to erect their plants away from business centers, where water power is available. A great number of cotton mills are therefore to be found at remote points, where lodging and food are obtainable at extremely low figures. The first are partly provided for by the employers. In the districts commented upon by Dr. Schuler, where there are 9,868 hands employed in the cotton industry, employers have erected 1,240 dwellings for their employees, and these are now occupied by 5,718 people. The rent of many of these apartments is exceedingly cheap. Owners often derive therefrom but 2 and in some instances 1 per cent interest on their investments. Taking also into consideration that these hands can buy their articles of consumption at low prices, either at their mutual benefit association stores or from the employer who buys them in large quantities at wholesale rates, thereby enabling him to supply his working hands at from 10 to 15 per cent more cheaply than they could buy elsewhere, it will be easily seen that the expenses of cotton-mill operatives are in general very small; hence they can better afford to work for lower wages.

In general, wages in cotton mills show a slow but steady upward tendency. This is principally due to improvements in machinery. Wages for piecework remain the same, but the laborer is able to produce more, and, therefore, to earn more. The average wages paid in cotton mills is 644 francs (\$124.29) per head and year. Most of the wages vary between 1.50 and 2.50 francs (29 and 48 cents) per day. A day's pay of over 4 francs (77.2 cents) is an exception for ordinary factory labor in a cotton mill.

Wages in cotton-weaving establishments are also low, being also influenced by the world's sharp competition. Besides, labor interruptions in this line are more frequent, because more easily carried out. The operative material in the weaving line must be better than in the spinning establishments. Only laborers with certain physical advantages, especially agility, are enabled to earn tolerably fair wages. In 1891, the average pay was 629 francs (\$121.40) per head and year; for men, somewhat over 3 francs (58 cents) per day, and for women 2 francs (38.6 cents). The lowest wages are earned by reelers, who, without exception, are women and children, a good proportion of whom are old or sickly people. Competition in this line is great, being for many the only means of earning a livelihood commensurable to their little strength; consequently more than one-eighth of these persons work for a day's pay of 20 cents and under, and in some rare cases even as low as 10 cents.

In the second textile industry (the silk industry), wages are high (so considered in Switzerland). In consequence of the traditional high wages in this industry, certain branches thereof, as, for instance, silk spinning and winding, can not prosper here. Foreign (Italian) competition injures that part of the Swiss industry, and depresses wages as well. Among the mill hands employed in the silk industry, females predominate, especially single

or widowed ones, as well as young, childless women. These generally leave their occupation when they become mothers. Men employed in spinning, winding, and twisting establishments are mostly mechanics, packers, firemen, foremen, and superintendents. At weaving establishments, men are mostly occupied to attend machinery, but a considerable number of weavers are also employed, especially at handlooms.

In dyeing establishments, men are employed almost exclusively; in finishing establishments they do the principal work, while women are employed at light side work. It is well known that silk spinning is not much in vogue here. In cities, this branch could never prosper, partly because laborers have better chances, can change their work for more agreeable occupations more frequently, and because only low wages could be paid. The consequence is the too frequent change in operatives. Wages for almost 30 per cent of these are below 1.50 francs (39 cents), and only 14½ per cent earn above 2 francs (39 cents). Of wages below 1 franc (19.3 cents) per diem, seven-eighths are paid in remote villages where there is no other industry. Probably there is no industry with so large a divergence, or where there are such visible advantages offered to laborers by a well-developed industry on a great scale.

Silk winding and silk twisting establishments, with 2,829 operatives in 1888, employed only 201 male operatives, and these were mostly employed as foremen or at side work. Winding and twisting establishments are principally located at points where no other industry exists, and consequently where living is very cheap, thus allowing lower wages than in cities or other industrial centers. In these establishments, a number of young people are employed temporarily, to earn a living, meanwhile getting stronger and able to change to other branches of the silk industry.

The most important branch of this industry is silk weaving. In 1893, this branch employed 9,950 persons. Wages in winding and twisting establishments vary from 2 to 2.50 francs (39 to 48.3 cents) per day; in spinning establishments, from 1.70 to 1.80 francs (32.8 to 34.7 cents). Warpers earn 2.50 to 3.10 francs (49.3 to 60 cents); weavers, 2 to 3 francs (38.6 to 57.9 cents) generally. Still, wages vary considerably, depending on the kind of articles manufactured.

EMBROIDERIES AND COTTON PRINTS.

Wages of embroiderers were at one time the most remunerative of Switzerland. In 1850, the wage of an embroiderer at St. Gall was 4.90 to 5.60 francs (94.2 cents to \$1.06); in the Toggenburg, 4 to 4.40 francs (77.2 to 84.9 cents). In 1880, 5.50 to 6.50 francs (\$1.06 to \$1.25) was the average day's pay in St. Gall. A few years later, wages began to decline, and this downward movement still prevailing rests heavily upon the laboring classes, and has been the direct cause of calling the union of embroiderers into existence, which, however, has not been able to accomplish anything of importance towards ameliorating the labor situation. The close-cornered

labor-giver who, in order to meet competition must get his work done at the very lowest figures, lets no chance slip to reduce wages, using all sorts of schemes whereby to deduct from and reduce the schedule of wages agreed upon.

For what was formerly known as staple articles, at which most of the labor was employed, and which was paying remuneratively, the poorest wages are now paid. Whoever can produce better results changes his business, if possible, to special articles in order to be better able to reduce wages. The consequence is that many abandoned this field of labor for more remunerative employment. The earnings of embroiderers are subject to great fluctuations. In the first line, they depend on the qualification and ability of the embroiderers. At the same work, one can make 1,500 and the other will reach 2,500 stitches, and an adroit embroiderer even up to 3,000 stitches. Naturally, the efficient workman receives the work needing the greatest care, and at the same time carrying better pay. But the number of expert workmen is getting smaller, no new ones appearing since the tempting high wages are a thing of the past. Run down by poor living, consequent upon low wages, the workers in this line have lost the principal initiative required in the producing capacity of this branch of industry, namely, perseverance. The schedule of wages, however, does not alone depend on the capacity of the working hands. There are establishments in which all wages are low for various reasons—poor machinery, poor patterns, endeavors of the labor-giver to keep wages as low as possible, etc. Then, again, entire districts pay much lower averages than others.

In large establishments, as a rule, laborers earn more than in the smaller ones. The mode of living among the embroiderers has changed in the same ratio as the earnings; the whole mode of existence has deteriorated. In the workingmen's homes there was, and in some there is yet to be found, a certain air of elegance. There were homes of the laboring classes which compared favorably with those of the well-to-do middle classes. To-day, all this has become too expensive for most of the embroiderers. The food, formerly comparatively rich, has to-day come down to the level of that of the poorest laboring classes.

The cotton prints industry, two decades ago, was flourishing in Switzerland, and brought many a fortune to men engaged in that line, while at the same time remunerative to labor, which had, as compared with other branches, easy jobs. Especially was this the case in Glarus, the principal industrial point of that branch at that time. In this line, as in others, manual work is little by little replaced by machines, thus reducing the number of employees as well as wages. Average wages in this industry are 2.80 francs (54 cents) for handmade prints, and 60 cents for machine-made prints.

IRON FOUNDRY AND MACHINE INDUSTRY.

In this line, about 11,109 men are employed in the district known as eastern Switzerland. This is comparatively a new industry, and became

important only after the year 1850. To-day, it is the most flourishing of the Swiss industries, and workingmen in this line are generally in favorable circumstances. Most of the establishments, especially the larger ones, endeavor to produce the very best and manufacture nothing else; hence they employ good mechanics only, who can not be easily replaced. Apprentices in this line are selected from among good scholars, most of whom have attended the high schools, and many of them are of the better class. Ten per cent of the men are under 18 years of age, and about 11 to 12 per cent are apprentices. Of the apprentices, 30 per cent are learning the locksmiths' trade, 26 per cent the molders', 21 per cent the casters', 18 per cent the designers', 3 per cent copper and tinsmithing, and 2 per cent joinering. It is difficult to get at the exact wages of adult laborers on account of the continual change from day to piecework, etc. In some establishments, a minimum is guaranteed to laborers on piecework, and this minimum serves, as a rule, for a basis to indicate the regular day's pay.

It is noteworthy that in some factories, high wages are relatively common, while in others, they are low. This difference exists in cities as well as in the rural districts, high and low wages being paid at the same points; hence it is supposed that in some establishments there must be more unskilled laborers than in others. The wages classified up to 3 francs (57.9 cents) apply mostly to apprentices and unskilled laborers, and they are about one-fifth of the whole. Then come wages of from 3 to 5 francs (57.9 to 96.5 cents) in a proportion of 57 per cent, while 23 per cent of the laborers earn 5 to 10 francs (96.5 cents to \$1.95) per day and over.

KNITTED UNDERWEAR.

Early in May, I had occasion to visit a large manufacturing concern situated in the rural districts of the Canton of Aargau, where knitted underwear is made, a good portion of it being exported to the United States. Guided through the establishment by the proprietor, I found about 500 female operatives at work, all apparently in good health and spirits. Most of these were young girls, with a small proportion of middle-aged women. I asked my guide what wages these people were earning, and he replied that 1.50 francs (29 cents) per day was the average wages paid. Turning to him in amazement, I exclaimed: "How do these people manage to get along on such small pay?" "Well," said he, "they are quite happy. They are the children, wives, or widows of small farmers, and their earnings help to make up the shortcomings of the small farm. They dress in cotton the year round, and their diet is bread, coffee, and potatoes three times a day, with occasionally some meat, wine, and vegetables on Sundays. They all have some money in the savings banks."

EUGENE GERMAIN,
Consul.

ZURICH, *June 11, 1895.*

DRAINAGE OF LAKE COPAIS.

The so-called Lake Copais (or Cephissus) is a marsh in the western end of Bœotia, 240,000 stremmas, or about 60,000 English acres in extent. It is the natural reservoir of the waters poured down from the ranges of Helicon, Parnassus, Ptoum, and the other mountains by which it is surrounded. Lake Copais is 95 meters (311.68 feet) above sea level. Its south and west banks are a continuation of the plains of Petra, Chæronea, and Orchomenus. The northwest bank is pierced by the deep Melas, or Black River, which traverses the entire north region of the lake, running parallel with and close to the north bank. The Melas rises at the foot of the acropolis of the ancient city of Orchomenus, and empties into the Grand Katavothra, through an opening under a cliff at the extreme east.

Before going further, it will be necessary to describe the katavothras of Lake Copais. The lake is walled in, especially along its northeast and eastern shores, by limestone cliffs, which are pierced by a series of fissures of greater or less size, serving as the mouths of natural tunnels, leading to the plains far below, and in a few instances, at least, to the sea itself. That the Grand Katavothra empties into the Bay of Scroponéri, an arm of the Strait of Megroponte, is known by the fact that sharks and other ravenous sea animals frequent the bay for the purpose of catching the famous eels of Copais, which issue at that point in large numbers into the salt water. In this instance, the sharks seem to have developed epicurean tendencies, for Pausanias, speaking for the epicures of antiquity, says that the eels of Copais "are very large and very sweet."

The katavothras are situated at or near the surface of the lake, and serve as its natural outlet. They are 23 in number.

The other principal rivers besides the Melas are the Cephissus, the Hersyne, the Pantgia (or Coralis), and the Laphis. In general terms, the lake is naturally filled from the south and west, and is emptied on the northeast and east.

Extensive works of great antiquity exist in and about Lake Copais, and there is little doubt that in very ancient times, probably in the palmy days of Orchomenus, the region was highly cultivated, and was more healthful than it has been of late years when so large a tract of land has been periodically inundated and dried up.

The modern enterprise of draining Lake Copais and cultivating its area was inaugurated in 1880 by a French company under the title of the "*Compagnie Française pour le dessêchement et l'exploitation du lac Copais*," with a capital of 15,000,000 francs (\$2,895,000), afterwards reduced to 9,514,500 francs (\$1,836,298). This company commenced operations on a grand scale and with very liberal expenditures. To the east and south of Copais, are the two lakes Hylicus (or Likeri) and Paralimni. These were connected

with Copais by means of tunnels, and a cutting was made from Paralimni to the sea. On June 6, 1886, the dam, which held back the waters, was cut with great ceremony, and Copais was emptied into Likéri in forty-nine days. The French company was wound up in 1887, after paying dividends out of capital for three years, and in October, 1887, the works and grant were bought in by an English company known as the Lake Copais Company (limited). Offices were established in London, Athens, and Thebes. The price paid was £500,000 (\$2,433,000) in shares of the new company. The English company has a nominal value of £1,000,000 (\$4,866,000), of which more than half is subscribed, and in addition £200,000 (\$973,200) of debenture stock has been issued. The works as now completed consist of—

(1) Grand Canal with a total length of 33,600 meters (110,234.8 feet), of which 10,600 meters (34,776 feet) lie in the marsh itself. It consists of a canal proper, whose average width is 24 meters (78.7 feet) and of supplementary embankments, the distance between which is 68 meters (223.1 feet). The Grand Canal skirts the lake on its southern and western shores, intercepting the rivers which empty in that region.

(2) An interior canal for surface draining—width, 20 meters (65.6 feet); length, 23,400 meters (76,770.7 feet).

(3) A junction canal, joining the Cephissus and Melas rivers, the length being 2,000 meters (6,561.6 feet), by which the waters of the former river are let into the canalization of the latter.

(4) Canalization of Melas River, the width being 22 to 26 meters (72.2 to 85.2 feet); depth, 8 to 10 meters (26.2 to 32.8 feet); length, 17,800 meters (58,398.2 feet).

(5) Canal from Melas River to grand emissary at Karditza, 8 meters (26.2 feet) wide, 3 meters (9.8 feet) deep, and 7,000 meters (22,965.6 feet) long.

(6) Grand emissary of Karditza—length, 4,000 meters (13,123 feet); width, 26 meters (85.3 feet); depth, 16 meters (52.5 feet).

(7) Division of Moriki, between lakes Likéri and Paralimni—length, 1,500 meters (4,921 feet); width, 25 meters (82 feet); depth, 3 meters (9.8 feet).

(8) Tunnel of Karditza, 16 meters (52.5 feet) wide, and 12 meters (39.3 feet) high, and 630 meters (2,066.9 feet) long.

(9) Tunnel of Hungara, between lakes Hylicus and Paralimni—length, 980 meters (3,215.2 feet).

(10) Tunnel of Anthedon, from Paralimni to the sea—width, 10 meters (32.8 feet); height, 12 meters (39.3 feet); length, 860 meters (2,821.5 feet).

In 1894, there were 40,000 stremmas, or about 10,000 acres of wheat harvested from the drained lands, yielding 110,000 bushels; 3,200 stremmas of barley, yielding 13,000 bushels; 3,800 stremmas of beans, yielding 17,000 bushels. The average net income to the company was 3.05 drachmas* per stremma, or 12.20 drachmas per acre. On 3,000 stremmas put into cotton, the average net income was 9 drachmas per stremma. Mr. Steele, the agri-

*1 drachma=19.3 cents United States currency.

cultural manager of the company, is now in Egypt studying cotton culture there, with the idea of growing this plant more extensively at Copais.

There were 70,000 stremmas of land in all under cultivation last year, and the company hope soon to utilize the entire 240,000 stremmas of the rescued tract. Two systems of cultivation are in force, the company itself working a portion of the lands, while another portion is let out on shares to tenants. The former system gives better results from a scientific standpoint, as it enables experiments to be carried on and agricultural implements of a modern character to be introduced. A few American plows are in use. The peasants, when left to themselves here as elsewhere in Greece, employ implements which have been handed down from the remotest antiquity. The plow in common use at Copais is an exact copy of the "Arotron" of Hesiod's time. Strange to say, it performs its function very well. It does not lay a furrow, but makes a simple ditch, heaping up the earth on either side. Two plowings of the rich, dark soil, however, put it in fair shape.

The surface of the bed of Lake Copais is covered with a deep layer of peat, formed from the roots of the reeds that have grown there for hundreds of years. When this catches on fire it burns persistently to a great depth. It is the aim of the company to set it on fire soon after the close of the rainy season rather than later in the fall, as at the latter period the conflagration is so great as to endanger the soil. Experiments are being made to press and utilize this peat, and those who are versed in such matters prophesy success.

Before closing this part of my report, it is necessary to add that the company has suffered considerable annoyance from peasants who have laid claims to the drained lands—claims which they have, in some instances, attempted to make good by armed force. It is but fair to say that the Government has thus far shown a disposition to protect the company in its ceded rights. The contract between the Government and the company as to the present and ultimate disposal of the recovered land is as follows: Three thousand seven hundred and fifty acres are to be distributed pro rata to those peasants who can satisfactorily claim to have property within the area conceded. At the end of ninety-nine years, two-thirds—say, 40,000 acres—go back to the Government, and one-third—say, 20,000 acres—remains the property of the company.

The ancient works in the bed of Copais and in the region of the lake belong rather to the archæologist than to a report of this kind. According to two articles by Michael L. Kambains, in the Journal of the French Archæological School of this city, these works are remarkable in extent and perfection, and show wonderful perseverance and a high knowledge of engineering as understood to-day. They consist, in brief, of—

(1) A system of canals and interior ditches in relation to the kata-vothra.

(2) A subterranean gallery in the neck of Kephalarie, which neck is an extension of Copais between the Isle of Gha and the promontory of Toplais. On the latter promontory, was situated the ancient city of Copæ, from which

the lake was named. In the neck were found sixteen wells, beginning with a depth of 18 meters (59 feet), and ending at 63 meters (206.7 feet). These wells were evidently intended to facilitate the digging of a tunnel 24,000 meters (78,739 feet) long, having the slope indicated by the gradually increasing depth of the wells.

(3) Distribution of the water toward the sea through lakes Likéri and Paralimni.

The present company has been working about 1,200 men per annum, to whom they pay a wage average of 3.20 drachmas,* or about 34 cents a day in United States money. So far about 14,000,000 francs (gold) have been expended by the company.

For the information contained in the above report, I am chiefly indebted to Mr. Rossetto, secretary of the company, four articles in Greek in the Athens Estia, The Journal of the French School of Archæology of Athens, and a report to the British Foreign Office by the vice-consul at Piræus, dated 1892.

GEORGE HORTON,
Consul.

ATHENS, June 15, 1895.

ALCOHOLISM IN FRANCE.

M. Maurice Laporte Bisquet, senator for the department of la Charente, France, has recently published an interesting brochure inveighing against the *bouilleurs de cru*, or farmers who convert all or part of the products of their vines and fruit trees into an indifferent brandy by a process of imperfect distillation. The existing law of France concedes to this class of distillers having small portable stills, entire liberty to manufacture not only their own grapes, apples, prunes, pears, peaches, and other fruits into brandy, without paying any tax, but also the crops of their neighbors which may be delivered at the still, as we deliver grist to the mill; or, the owner of a still may move his machine to any place where a crop of fruit has been gathered, like the American farmer who removes his thrashing machine from farm to farm to thrash the crops of his neighbors. Such a combination, or cooperative scheme, it is said, constitutes not only an enormous fraud on the national treasury, but seriously injures the large producers and professional distillers, who are heavily taxed on their expensive plants, and on every liter of brandy or alcohol they produce.

It appears that the law exempting farmers from taxation on alcoholic drinks distilled on their own premises and from their own fruits, was intended originally to apply to the manufacture of a limited quantity of such alcohols, or so much as they might require for home consumption; but the

* According to the United States Treasury, Greece has a fixed currency (gold and silver), and the drachma is valued at 19.3 cents, which would make the daily wage 61.76 cents. Either the labor is paid in a depreciated currency, or the consul has made an error in his reduction.

result has been the production of an enormous quantity of vitiated or sophisticated brandy, which is sold to the community and to the drinking houses or "debits," at a very low price, with the effect of greatly increasing the habit of drunkenness in France. This habit, according to Senator Bisquet, has grown to such proportions since the introduction of the system of *bouilleurs de cru*, that he thinks "the country stands in the presence of a very serious danger." The evil, he says, "is not confined to the moral and social aspects of the question; it has made itself felt in an enormous reduction of revenue to the Government, amounting to more than 32,000,000 francs annually," by reducing the consumption of wine and pure brandy on which there is a tax, but for which there is no longer a ready market.

Beyond doubt, the legitimate commerce in alcohols, especially brandy, has been greatly reduced within the last ten or fifteen years. The large houses complain that their business has fallen off from 25 to 50 per cent, and the proprietors of large vineyards protest against the great reduction in the price of their wines, caused by the increased consumption of impure cheap brandy manufactured and sold by the *bouilleurs de cru*.

In 1874, there were less than 300,000 of these distillers in France. At that time not more than 40 liters were allowed to be produced by a single proprietor of these small stills, and this was confined solely to family use on the premises. In 1889, the number of such distillers had increased to 500,000, and in 1894 it was raised to more than 900,000, with the privilege of unlimited production. The result is that many of the large distillers of brandy, in the north of France particularly, have been forced to close their establishments, and the cheap light wines, which were formerly so popular, and which Thomas Jefferson said (Jefferson's Memoirs, Vol. IV, p. 78), were "a great gain to the sobriety of any country," are fast giving place to poisonous alcoholic beverages made with all sorts of ingredients, and by the most primitive processes, without rectification, and under no state or municipal supervision. From a hygienic point of view, it is impossible to overestimate the dangers which arise from the habitual use of such alcoholic drinks as are now manufactured by the farmers of France, and a great deal of which, no doubt, finds its way to the United States as "pure French brandy." It is estimated that many thousand hectoliters of this pernicious distillation are annually exported to the United States. There can be no denying the fact that since the advent of "crooked brandy," the progress of alcoholism in France has been very rapid. Official documents bearing on the subject show that the increase of drunkenness among the lower classes in the last decade has been alarming. After having been long a sober people, the vice of intemperance has become a great moral pestilence.

A writer in Le Havre, May 29, 1895, says:

Alcoholism is the great misfortune of the present day, and if the evil is not corrected France—the country of sunshine, of good wine, and great gayety—will be changed into a nation of brutes by this ignoble vice. The peril is evident, and it is high time to check it. I know that the infamous vice is not peculiar to our country, but I see that its ravages are greater here than elsewhere.

As a means of suppressing the evil, the writer urges that the question be taken up in the public schools, and that lessons on the disastrous effects of alcoholism be impressed upon the youthful minds of the rising generation.

There is another dark side to the question. In France, it has been found that insanity has increased *pari passu* with the increase of drunkenness. It is computed that, in 1884, the number of insane persons in France had increased to 133 per 100,000 inhabitants; in 1885, the number had increased to 136, and it is fair to assume that the increase has progressed with an equal step since then, so that the number of insane in France at this time may be reckoned at 166 per 100,000 of population, the increase being, it is said, in a direct ratio to the increased production and consumption of alcoholic drinks. Comparing statistics, we are led to infer, if like causes produce like effects, that alcoholism is on the increase in other countries besides France. In 1883, Italy contained 67 and Germany 82 insane persons, respectively, for every 100,000 of population—a noticeable increase over previous years. The United States in 1850, with a population of 23,000,000 inhabitants, had 15,610 insane; in 1860, with 31,000,000 inhabitants, there were 24,042 insane; in 1870, with 38,500,000 inhabitants, there were 37,432 insane; in 1880, with a population of 50,000,000, there were 91,997 insane. Thus it will be seen that while the population of the United States from 1850 to 1880 had only a little more than doubled, the number of insane had sextupled; and in the following ten years—from 1880 to 1890—for an increase of 30 per cent of inhabitants, there has been an augmentation of 155 per cent of insane.

But it is illogical to attribute this alarming increase of insanity in the United States solely to the increased consumption of alcoholic drinks. There are in the United States contributing causes which do not operate to the same extent in other countries, and one which has no existence in any other country. We have, in common with other countries, morphinism, cocainism, chloralism, chloroformism, the ever-growing conflicts between labor and capital, and the excessive thirst for wealth which exists in the United States, and which tends to enfeeble the mind and dethrone the reason. The effects of our great war have also added materially to the insanity percentage. The theory of the French moralists that alcoholic liquors are alone responsible for the increase of insanity in France can not, therefore, properly be wholly applied to the United States, where there are other potential conditions at work to produce similar results.

Undoubtedly it would be a great desideratum to effect a modification of the use of alcoholic drinks in the United States, and to substitute for them cheap wines, as it is proposed shall be done in France, both as to brandy and absinth; but the question is, how can it be accomplished? In this connection, it is worth while to quote again from Thomas Jefferson:

It is an error to view the tax on wine as merely a tax on the rich. It is a prohibition of its use to the middle class of our citizens, and a condemnation of them to the poison of whisky, which is desolating their homes. No nation is drunken where wine is cheap, and

none sober where the dearness of wine substitutes ardent spirits as the common beverage. It is, in truth, the only antidote to the bane of whisky. Fix but the duty at the rate of other merchandise, and we can drink wine here as cheap as we do grog, and who will not prefer it? Its extended use will carry health and comfort to a much enlarged circle; everyone in easy circumstances will prefer it to the poison to which they are now driven by their Government, and the treasury itself will find that a penny apiece from a dozen is more than a groat from a single one. (Jefferson's Memoirs, Vol. IV, p. 320.)

So long as wine was the cheapest drink to be had in France, it was the national and universal drink, and the people were a sober people; but when the *bouilleurs de cru* produced a pernicious brandy at a greatly reduced price, in unlimited quantities, the character of the nation for sobriety was changed, and drunkenness became the prevailing habit among the lower and middle classes.

C. W. CHANCELLOR,
Consul.

HAVRE, June 15, 1895.

FRENCH COGNAC BRANDY.

The exports of Cognac brandies from this district (Cognac) through the ports of Tournay, Charente, La Rochelle, and Rochefort, according to the published statement of the trade, amounted to 5,060,488 gallons in 1894, against 4,199,380 gallons during the year 1893, showing an increase of 861,108 gallons for 1894. Some additional shipments were made in 1894 by the Pacific Steam Navigation Company, but the company refused to make a statement thereof. This increase is not surprising, as it is undoubtedly due to the splendid harvest of grapes in 1893, which has produced, as is well known, Cognac brandy of an incomparably fine flavor, and has replenished the old stock on hand.

The brandy merchants of the two Charentes are considering the question of forming a syndicate for the protection of their interests and the prosecution of those merchants outside the Cognac district who have usurped the mark "Cognac brandy" for their products, which are in most instances greatly inferior to the products of the vines grown in the vicinity of the Charentes.

Owing to the gradual adoption of the name "cognac" by the brandy merchants in all parts of France, and even in other countries, the name itself has ceased to be any guaranty of genuineness or excellence. One brandy house of Bruay (Nord) offers "cognacs" ordinaires at 85 cents per case of twelve bottles; "cognacs," fine champagne, at \$1.80 per case, and "cognacs," grand champagne, at \$3 per case. Brandy houses of Bordeaux and Marseilles are flooding other countries with "cognacs" of the same factitious kind and quality. The producers of wine in the "Champagne" have secured for themselves the exclusive use of the word "champagne" for their products, and the merchants of Cognac desire to secure a similar right.

The production and exportation of brandy in and for the two Charentes (the Cognac brandy districts), from 1861 to 1894, were :

Year.	Wine produced in the Charentes.	Wine distilled.	Brandy pro- duced.	Exports of brandy from the district.
	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
1861-1891.....	3,115,180,608	2,746,179,736	379,836,106	231,282,499
1892.....	12,333,146	11,755,565	4,992,813	5,581,198
1893.....	28,935,729	27,605,765	6,900,020	5,439,447
1894.....	16,602,850	14,793,520	2,993,917	6,483,920
Total.....	3,172,952,333	2,800,234,586	394,722,856	248,787,064

After making allowances for loss by evaporation and other causes, there still remains on hand an amount of brandy sufficient to supply all demands for many years to come without counting upon future vintages, and this computation does not take into consideration that there was a large amount of brandy on hand in the year 1861 (exact amount unknown), which would materially increase the amount on hand at the present day.

FREDERICK FITZ GERALD,
Consul.

COGNAC, *April 20, 1895.*

WINE MAKING IN FRANCE.

In the preparation of the following report on French vintage, extending over a period of twenty years, no effort has been spared to collect reliable information, and I present the result in as condensed form as possible.

Owing to the vine disease and the ravages of the phylloxera, it has been found necessary to seek a species of vine immune to such evils, and it is now claimed that this desideratum has been supplied in a hybrid produced by Mr. Franc, of which a full description is given. Some information is also furnished of the manufacture of cider from dried apples, now so extensively used as a beverage in France, and as the crop of apples this year will be below an average one in France, imported dried fruit will no doubt rule higher in price than for many years past.

The grape is not necessarily an element in the production of wine. We commonly describe wine as the fermented juice of the grape, yet it is not always so, for much of the so-called wine is perfectly innocent of any acquaintance with the product of the vineyard. Recently, the municipal laboratory of Paris, whose function it is to detect adulterations of food and drinks, caused 15,000 casks of so-called wine to be seized and destroyed. The official analysis could not detect in the whole lot a single drop of grape juice ; but what it did detect was water, alcohol, sulphate of gypsum, glycerin, salts of potash, and berries for coloring.

It is a significant fact that whenever the vintage is poor, it has been found that immense quantities of sugar, amounting in France in 1887 to upwards of 36,000 tons, have been used for mixing with the wine, while the deficit in the production of the vineyards has been, in a measure, made good by the making of many millions of gallons of wine (so-called) from raisins, currants, and the lees of the wine press. Sweetness in wine covers a multitude of defects without improving its quality, yet many persons insist on giving the preference to sweet wines, with the result that acidity and indigestion are sure to be produced, and these, sooner or later, make way for rheumatism and gout. It is to the volatile ethers which age develops in wine, particularly when bottled, that the flavor and the highly prized aroma, technically termed "bouquet," are due, and their formation is the result of the action of the alcohol generated during fermentation upon the bitartrate of potash contained in the grape juice. Taking 100 degrees to represent proof spirits, the following figures will represent the percentage of alcohol contained in different wines, or, in other words, their relative strength: Port, 36 degrees of strength; sherry and Madeira, 34; Burgundy, 19 to 20; Champagne and claret, 15 to 18 per cent. Every wine-growing country puts forward some claim in favor of its own production, and among critics, where so many different tastes are concerned, the old proverb, "Many men, many minds," holds good. One will talk enthusiastically of Champagne, another of Burgundy, and so on, but Mr. Webber, a high authority on such matters, asserts that port is the finest of all red wines, and that sherry is the finest of all white wines, basing his opinion on the fact that these two engender naturally, in the process of fermentation, a larger proportion of alcohol than other wines.

In selecting wines to drink, it is important to take into consideration the wide range of difference between the dietetic properties of inferior and superior kinds of wine bearing the same name, and therefore nominally identical; but in this, as in other instances, it will be found that the best is the cheapest in the long run, because it gives the most ample value for the money where a judicious selection has been exercised. It is curious to note how much mere accident may influence the national consumption of any article of food or drink. In England, the habit of port wine drinking, to a large extent, dates from the year 1703, when by a reciprocal reduction of tariffs the English Government made the duty on port wine one-third less than that charged on the wines of other countries, the Portuguese conceding a corresponding reduction as regards English productions. This led to the gradual substitution of port for French wines, but of late the French clarets have come more into fashion, the vintage in the claret districts being carefully conducted upon the most scientific principles, while in Portugal, the wine growers, who are for the most part small farmers, continue in many instances to make their wines according to the primitive methods practiced by their forefathers.

In considering the color of wine, it should be borne in mind that the juice of almost every grape is white, so to speak, there being only two exceptions to this rule, namely, the Pontac grape and the new grape known as the "Hybrid Franc," which will be noticed further on. The color of red wine is derived generally not from the juice, but from the skin of the grape. Three-fourths or even a larger proportion of Champagne is made from red grapes, which, if allowed to ferment with the skins in the process of vinous fermentation, would give red wine as the result—similar to that produced by all red-skin grapes under like circumstances. The *œil de perdrix* (partridge eye) color noticeable in Champagne, is imparted to it unintentionally, in consequence of the grapes being ripe to bursting when gathered, so that the color of the skin slightly tints the pulp. The keeping property of wine is due to tannin, which, for the most part, is obtained from the skin of the grapes during the process of fermentation. The greater astringent property of red wines, as compared with white wines, is owing to the fact that the skin of red grapes contains a greater per cent of tannin.

A NEW VINE PLANT.

The "Hybrid Franc" grape referred to above, is the product of a vine plant which is said to be much more hardy than any other known vine, and the yield of fruit is quite phenomenal. It is also said to be quite immune to the phylloxera, a hemipterous insect which attacks the roots and leaves of the ordinary vine, and which has done such incalculable injury to the vineyards of France for many years past. This new vine is the result of hybridity, and was first produced by Mr. Franc, whose name it bears, by successive graftings of our California vine upon the ordinary French vine. For his valuable discovery, Mr. Franc has been made by the Minister of Agriculture a chevalier of the Legion of Honor.

I append below a translated copy of a letter which I have recently received from Mr. D. Coubard, an intelligent vine culturist in the south of France, giving a detailed account of the origin and growth of the vine:

CHATEAU DE LA MAILLETTERIE,
Bouqueil, July 12, 1895.

DR. CHANCELLOR,
Consul of the United States, Havre.

SIR: I have the honor to reply to your request for information concerning the "Hybrid Franc," and at the same time to extend to you my congratulations upon your desire to acquaint your Government with the valuable discovery.

Since the appearance of the phylloxera, no vine plant has been discovered that would resist the destructive effects of that insect, and to solve the difficult problem we had annual recourse to the process of grafting; but this was an expensive process and could only be applied to low ground where the soil was free from calcareous matter. The work was persevered in, however, by numerous vine growers who did not despair of some day finding or producing the ideal plant that would bring back the former prosperity of our vineyards. Such a plant, I can now truthfully assert, has been discovered. Mr. Franc has obtained by the hybridation of one of our best French vine plants (the Cabernet) with one of the hardiest species of American plant (the Rupestris) a marvelous result.

After nine years' experiment, this hybrid, a cross between the French and American vine, has been found to resist perfectly the destructive effects of the phylloxera; it is, moreover, a remarkably vigorous plant which will grow in a poor, dry, calcareous, or ferruginous soil, where other vine plants would wither and die. The shoots or branches are very numerous and long, and bear a great quantity of grapes, which resemble those of Burgundy; the juice is a beautiful red color, and the flavor rich and agreeable. The settings of three years give from 30 to 40 bunches; those of four years from 60 to 80 bunches; those of the sixth and seventh years strike the eye at first by their luxuriant vegetation and the astonishing increase when one looks upon the profusion of grapes. Each vine stock bears from 30 to 40 shoots, showing two, three, and even four grapes to each shoot. These vines resist not only the encroachments of the phylloxera, but all cryptogamic maladies, and the treatment heretofore applied for these evils becomes superfluous; they require a less fertile soil, and are not so easily affected by frost as other vines. The wine is a beautiful deep red color, very fine and very "bouquet," of 12 per cent alcohol; it is a medium between the wines of Burgundy and those of Medoc, and was awarded the gold medal at Paris this year. One can conceive that this marvelous vine plant will play an important role in the reconstruction of the vineyards of France, not only on account of the resistance to all maladies, but also on account of the abundance and remarkable quality of the wine.

The plantations that I have made of these vines are not only satisfactory, but confirm my convictions of their superiority over all others.

Accept Monsieur le Consul, the expressions of my consideration the most distinguished.

D. COUBARD.

STATISTICAL INFORMATION.

I have had the honor to receive from the Minister of Agriculture the reports and statistical tables of his department extending over a period of many years, from which I have collated the following data, interesting to wine growers and pomologists, from which other facts may be deduced. The French vintage of 1893 (the last report issued by the Agricultural Bureau), shows an improvement, so far at all events, as quantity goes, over the preceding six years, the total quantity of wine made in 1893 being estimated at 1,334,616,191 gallons as against 645,571,600 gallons in 1892; 789,425,247 gallons in 1891; 726,519,665 gallons in 1890; 646,822,342 gallons in 1889; 677,289,000 gallons in 1888, and 546,797,000 gallons in 1887. It must, moreover, be added that the total for the last fifteen years, from 1878 to 1894, is considerably below the average of the preceding fifteen years.

Although there was such a great increase in the quantity of wine made in 1893 over that of the six preceding years, that increase was confined to forty departments of the seventy-seven in which wine was made. The appended table, compiled from the annual reports of the Minister of Agriculture, will serve to show the quantity of wine made in the twenty departments where the vintage was best, by comparison with the results obtained in the same departments during the eight preceding vintages.

Yield of wine.

Department.	1885.	1886.	1887.	1888.	1889.
	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
Hérault.....	48,550,000	67,390,000	84,507,000	101,408,000	107,077,000
Gironde.....	24,211,000	24,945,000	25,635,000	67,500,000	61,751,000
Aude.....	47,161,000	53,390,000	42,379,000	54,372,000	31,153,000
Gard.....	10,280,000	16,861,000	20,744,000	32,947,000	23,965,000
Pyrénées-Orient.....	18,141,000	26,442,000	18,837,000	25,240,000	19,813,000
Loire-Inférieure.....	10,116,000	16,042,000	17,437,000	25,110,000	9,808,000
Puy-de-Dôme.....	36,689,000	26,354,000	18,396,000	25,105,000	14,580,000
Bouches-du-Rhône.....	2,700,000	5,435,000	7,875,000	22,410,000	16,261,000
Gers.....	9,967,000	16,512,000	14,377,000	20,970,000	24,977,000
Haute-Garonne.....	12,955,000	16,994,000	10,365,000	17,970,000	10,360,000
Loire-et-Cher.....	27,405,000	17,640,000	8,550,000	17,280,000	12,953,000
Côte d'Or.....	24,796,000	14,160,000	12,220,000	15,750,000	13,280,000
Maine-et-Loire.....	20,160,000	10,459,000	19,571,000	14,850,000	13,383,000
Saône-et-Loire.....	19,220,000	13,146,000	9,576,000	15,030,000	13,032,000
Indre-et-Loire.....	22,571,000	13,005,000	13,053,000	13,950,000	13,861,000
Charente-Inférieure.....	13,702,000	15,723,000	13,562,000	11,150,000	11,052,000
Meur-et-Moselle.....	10,732,000	4,900,000	12,297,000	9,315,000	12,595,000
Pyrénées-Basses.....	945,000	1,140,000	2,225,000	8,225,000	2,700,000
Rhône.....	10,330,000	6,380,000	6,390,000	8,234,000	5,900,000
Isère.....	9,225,000	9,180,000	7,800,000	7,810,000	6,700,000
Total.....	378,831,000	376,098,000	365,821,000	519,660,000	431,229,000

Department.	1890.	1891.	1892.	1893.
	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
Hérault.....	150,000,000	137,800,000	186,931,000	189,482,000
Gironde.....	32,400,000	52,700,000	38,027,000	166,651,000
Aude.....	76,850,000	52,000,000	87,387,000	116,971,000
Gard.....	29,756,000	35,298,000	66,766,000	54,108,000
Pyrénées-Orient.....	23,516,000	19,580,000	45,442,000	52,000,000
Loire-Inférieure.....	16,430,000	24,247,000	8,811,000	68,370,000
Puy-de-Dôme.....	23,452,000	30,720,000	26,348,000	31,800,000
Bouches-du-Rhône.....	25,261,000	23,842,000	30,687,000	31,647,000
Gers.....	23,400,000	38,558,000	17,225,000	53,000,000
Haute-Garonne.....	10,179,000	8,762,000	6,751,000	15,700,000
Loire-et-Cher.....	12,113,000	21,690,000	11,925,000	26,394,000
Côte d'Or.....	13,975,000	11,700,000	7,999,000	16,509,000
Maine-et-Loire.....	13,000,000	19,552,000	7,483,000	25,175,000
Saône-et-Loire.....	14,919,000	10,084,000	7,287,000	18,030,000
Indre-et-Loire.....	12,964,000	23,187,000	12,084,000	36,059,000
Charente-Inférieure.....	10,034,000	14,170,000	10,600,000	24,128,000
Meur-et-Moselle.....	8,082,000	7,460,000	9,275,000	8,367,000
Pyrénées-Basses.....	2,840,000	1,342,000	4,054,000	8,627,000
Rhône.....	11,305,000	10,400,000	10,335,000	29,150,000
Isère.....	8,918,000	6,920,000	9,778,000	11,546,000
Total.....	521,380,000	550,012,000	605,304,000	985,767,000

It appears from the foregoing figures that the increase has been greatest in the departments like the Gironde (where the Bordeaux wines are made), the Bouches-du-Rhône, the Hérault, the Loire, and the Saône-et-Loire. The Charente and the Charente-Inférieure, which some years ago produced 320,000,000 gallons, did not produce 30,000,000 gallons in 1893. In the Champagne districts, generally, the yield of wine has fallen off, and the following table, taken in connection with the one preceding, will show what a change

has come over the French vineyards since the phylloxera made its appearance :

Year.	Acreage in vineyards.	Yield.	Imports.	Exports.
		<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
1875.....	5,550,000	1,820,000,000	6,000,000	81,787,000
1876.....	5,430,000	941,000,000	14,700,000	72,200,000
1877.....	5,360,000	1,260,000,000	14,210,000	67,200,000
1878.....	5,230,000	1,180,000,000	32,500,000	56,340,000
1879.....	5,116,000	579,844,000	61,475,000	68,915,000
1880.....	5,017,000	667,774,000	172,405,000	53,790,000
1881.....	5,003,000	768,121,000	176,055,000	58,147,000
1882.....	5,001,000	694,942,000	174,314,000	61,910,000
1883.....	4,999,000	810,656,000	193,000,000	62,174,000
1884.....	4,967,000	782,560,000	157,500,000	61,000,000
1885.....	4,970,000	642,063,000	182,587,000	55,575,000
1886.....	4,897,000	553,923,000	212,355,000	53,752,000
1887.....	4,860,000	546,797,000	260,595,000	54,100,000
1888.....	4,608,950	677,298,000	244,175,000	55,132,000
1889.....	3,914,272	646,821,000	271,492,000	56,292,000
1890.....	4,536,360	726,519,000	287,023,000	56,196,000
1891.....	3,596,612	789,425,000	304,151,000	55,836,000
1892.....	3,747,180	645,571,000	241,348,000	35,394,000
1893.....	3,722,167	1,334,616,000	139,292,000	40,329,000

There is not much encouragement to be derived from these figures, for if the imports of wine were not quite so great in 1893 they are still more than three times in excess of the exports, and twenty-five times more than they were in 1875, while in 1892 the imports were nearly seven times in excess of the exports, which are not half as much as they were twenty years ago. Of the imports for 1893, about 85,000,000 gallons came from Spain, 48,040,000 gallons from Algeria, the vintage of which is not included in the returns from France ; 6,315,000 gallons from Austria-Hungary, and 3,137,000 gallons from Italy. It will be observed that there has been a slight decrease in the acreage of vineyards since 1887, but it is more apparent than real, being due to the fact that the returns for 1888 and subsequent returns exclude the vineyards not in actual cultivation. This exclusion occurred for the first time in 1888.

The following table gives the quantity of wine exported by France from 1886 to 1894 to the several countries named :

Year.	England.	Germany.	Belgium.	Holland.	United States.	Argentine Republic.
	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
1887.....	8,331,600	7,215,215	5,632,639	2,157,868	1,689,228	14,061,252
1888.....	8,362,764	7,036,952	5,769,150	1,904,307	1,570,867	8,882,614
1889.....	8,344,108	6,980,842	5,761,209	1,921,568	1,522,041	10,320,255
1890.....	8,142,000	7,119,000	6,545,000	1,887,000	1,537,000	6,227,000
1891.....	8,957,000	7,172,000	7,446,000	1,881,000	1,457,000	2,691,000
1892.....	8,533,000	6,466,000	6,195,000	1,802,000	1,404,000	3,922,000
1893.....	8,294,000	6,413,000	5,538,000	669,000	1,113,000	3,217,000

WINE PRODUCTION OF EUROPE.

The following table shows as nearly as can be estimated the quantity of wine made in the different countries named in the year 1891. It will be seen that France, which some years ago produced more wine than all the rest of Europe, was, in 1891, second to both Italy and Spain :

Country.	Production.	Country.	Production.
	<i>Gallons.</i>		<i>Gallons.</i>
Italy.....	923,250,000	Turkey	73,000,000
Spain.....	897,654,000	Bulgaria.....	70,000,000
France.....	789,425,000	Greece.....	38,000,000
Portugal.....	115,300,000	United States.....	23,724,000
Austria-Hungary.....	98,000,000	Germany.....	13,500,000
Russia.....	75,000,000	Switzerland.....	500,000

AMERICAN VS. EUROPEAN WINES.

As the general use of wine has increased, other countries than those from which the supply was formerly obtained have entered into competition, and at least two English colonies, the Cape and Australia, are supplying considerable quantities to the mother country every year. The latest of the new competitors is Servia, which possesses in various parts great natural advantages for vine culture. The four countries which have no vineyards are England, Belgium, Holland, and Denmark, and in these countries I can see no reason why American wines should not enter into successful competition with those of other wine-growing countries. The claret manufactured in California and Virginia is quite equal to the vin ordinaire of France, Italy, and Spain.

THE CIDER CROP OF FRANCE.

The returns of the cider crop in France are published simultaneously with those of the vintage, and show a production of 334,104,368 gallons in 1893, as against 307,619,460 gallons in 1892, 245,703,000 gallons in 1891, and 291,500,000 gallons in 1890. A comparison of the quantity of gallons of cider produced in France in 1893, with the average production of the preceding ten years, shows an increase in that time of 503,500,000 gallons, or an average annual augmentation of 50,350,000 gallons. Although the cider crop is made up by sixty-five different departments, more than half of it is derived from six departments, the Ille-et-Vilaine, the Calvados, the Côtes-du-Nord, the Seine-Inférieure, the Manche, and the Orne—in other words from Normandy and Brittany—and it may be added that nearly all the cider made is for home consumption, the imports and exports being practically nil.

Production of apples for cider.

Year.	Yield.	Total value.	Average value per quintal.	Annual production of cider
	<i>Quintals*</i>			<i>Gallons.</i>
1889	4,169,589	\$9,289,636	\$2.23	97,076,000
1890.....	9,691,023	18,587,757	1.90	291,500,000
1891.....	8,230,728	16,195,086	1.95	645,703,000
1892.....	15,987,086	20,630,735	1.39	307,619,000
1893.....	38,846,474	23,551,211	.60	334,104,000

* 1 quintal = 220½ pounds.

The importation of apples and pears into France from all countries amounted in 1892 to 15,000 barrels, of which 2,000 were for table use, the remainder being dried apples used for making cider. In 1893, the importation had increased to 17,000 barrels, of which only 750 were for table use. Dried apples sell for \$10 to \$12 per barrel, including the duty, which will amount to about \$3.50 per barrel gross. As there has been a noticeable failure in the French apple crop this year, the importations will no doubt be largely increased, thereby offering a possible market for American fruits.

C. W. CHANCELLOR,
Consul.

HAVRE, *July 24, 1895.*

PRODUCTION OF SALT IN SPAIN.

The tourist or stranger entering Spain for the first time at Cadiz, its most noted and historic, if not its most important port, will receive many novel and interesting impressions. He will be impressed, in the first place, by the peculiar situation of Cadiz (the “Gades” of the Greeks and Romans), a beautiful and picturesque city rising apparently from the very midst of the sea, the waters of the Atlantic washing its walls on all sides except one—that by which connection is had with the mainland some leagues away by a long, curving strip of sand so narrow in places that the waters from either side almost wash over it at high tide. The city occupies the whole surface of the extremity of this sand-spit, which is in appearance, and almost in reality, an island. The railway leading from Cadiz to Seville and Madrid follows the narrow, ribbon-like isthmus above mentioned, which gradually widens as the mainland is approached into a broad marshy plain of considerable extent, and but a foot or two above tide in its highest parts. The surface of this plain is intersected in all directions by small canals and shallow basins, arranged in more or less systematic series, and the traveler going inland by the railway will observe, with curiosity and some astonishment, groups of white pyramids from 15 to 20 feet in height rising here and there from the midst of this low-lying marshy wilderness—appropriate resting

places for migratory sea fowls, which have not yet wholly abandoned their ancient haunts. A closer inspection will show that these groups of pyramids, which altogether number some hundreds, and which, at first sight, appear to be scattered promiscuously over the broad "marisma" are, in fact, placed on the "made ground," resulting from the excavation of the different series of basins already alluded to and in close proximity to the latter. Inquiry from a fellow-traveler, if a resident of the vicinity or a native of the country, will develop the information that these white pyramids are veritable "pillars of salt," and that the basins and canals are part of one of the most extensive and important industries of Cadiz—the production of salt by solar evaporation—an industry that is probably much older than the modern Cadiz itself, as there is every reason to believe that the Roman conquerors of the Iberian Peninsula produced salt on the same ground and by precisely the same process. There is authentic historical mention of the business in the fifteenth century, and perhaps earlier, but its development to its present proportions is of comparatively recent date.

The method of operating the "Salinas," as the works are called, is very simple. A saline river of considerable width and of sufficient depth to float lighters of small tonnage crosses the plain from the Bay of Cadiz on one side to the Atlantic on the other, and acts as a feeder to the network of canals from which the sea water at high tide is let into the basins of the Salinas whenever a fresh supply is wanted. The sluice gates of the basins are then closed and the bright, hot sun of Andalusia soon evaporates the water, leaving a deposit of salt on the bottom. Water is again let in, and the process is repeated until the deposit of salt in the basin reaches a depth of several inches, when it is shoveled up with wooden shovels, thrown into barrows or into panniers carried on the backs of asses and wheeled or carried up to the "montones," or pyramids, where it is deposited to await shipment. The surfaces of the pyramids, which are quite symmetrical in shape, become indurated from the action of the weather, and the salt can be preserved almost indefinitely in this way, though at the expense of a small percentage of loss each year from the winter rains.

As may readily be inferred, the cost of production is very low, and the profits of the owners of the works correspondingly large. The total amount of capital invested in the business is about \$2,000,000, distributed among 100 "socios," or shareholders. These shareholders do not constitute a single corporation, as might be logically inferred, but a number of independent concerns. The several firms and companies, however, have organized themselves into an association known as the "Concierto Salinero," which not only fixes the price of the salt when placed alongside the ship and the rates of wages, but also fixes the "turns" in which the various firms shall ship, regulating the shipments by rotation, so that all may enjoy equal advantages in the trade. The associated concerns form a monopoly, and their earnings are not made public, but reliable estimates place their average annual profits at from 12 to 15 per cent.

During the working season, which extends from May to October inclusive, the operations afford employment to about 1,500 men, whose daily wages vary from 2 pesetas (38.6 cents) to 7 pesetas (\$1.35), the hours of work being "de sol á sol" (from sunrise to sunset), but with intermissions that reduce the working time to eight or nine hours.

The aggregate annual production of the Cadiz "Salinas" is about 140,000 "lastres" (315,000 American tons), and the price fixed by the "Concierto" is 24 pesetas (\$4.63) per lastre placed alongside the ship in the Cadiz harbor. The transportation to the ship is effected by means of lighters upon which, owing to the easy access afforded by the canals, the salt is loaded directly from the "montones."

The bulk of the product is exported, most of it going to Buenos Ayres and other South American countries, where it commands a good market, its quality and cheapness specially adapting it to the general requirements of those countries. A few shiploads are also sent each year to Newfoundland, where it is used in the fisheries, and occasionally a shipload to Boston or some other North Atlantic port of the United States. No attempt is made to refine the salt, which is of a coarse quality and with a slight admixture of earth or silt, resulting from the crude process of manufacture.

The production of salt by solar and artificial evaporation and by mining, it may be added in conclusion, is one of the most important and valuable industries in Spain, the business being carried on in a number of places to a greater or less extent. In the "Zona Maritima," in which the system of solar evaporation is pursued, there may be mentioned among other places besides Cadiz as centers of production Ibiza, Torrevieja, San Pedro de Pina-ton, and Cabo de Gata. The principal mine, "Manantiales Salitrosos" (salt springs), are those of Cardona in Cataluña, Minglanilla in La Mancha, Imon and others. The total annual production of the country runs into the millions of tons, affords employment and sustenance to thousands of persons, and yields large returns to the operators.

CHAS. L. ADAMS,
Consul.

CADIZ, *November 21, 1894.*

THE MINES OF HUELVA.

ANCIENT AND MODERN MINING.

The Province of Huelva constitutes one of the most important mining districts of Spain, in it being found one of the richest and most extensive metalliferous zones of the Peninsula. That its numerous mineral deposits were worked in ancient times by the Phœnicians, Romans, and Moors is proven by the enormous heaps of slag found in close proximity to the mines, and by different objects found in the old workings, such as stone and iron, hammers, tools, and implements of different kinds, as well as old coins.

From the nature of the old workings met with in nearly all the mines that have been reopened, it would seem that the ancients devoted their attention mainly to the extraction of the richer portion of the lodes, leaving as gangue or sterile material that portion which did not suit them for smelting purposes, but which in modern times has given such remarkable results, these results being due, in a great measure, to the high state of perfection attained at the present day in the construction of mining machinery, mining tools, and the use of powerful explosives, by which means these mines are now worked so economically.

There is no doubt that the rapid strides made in this province are almost entirely due to English capital. This development can be best appreciated by the statement that the port of Huelva has risen in a few years from an insignificant fishing village to an important commercial center, and now ranks fourth in position among the principal ports of the nation.

MINING ZONES.

The great central mining zone extends from the Province of Seville, west of the river Guadalquivir, having for its limit in that direction the "Arnal-collar" and "Castillo de las Guardas" mines, continuing westward through the Province of Huelva and on to the Portuguese coast, embracing a length of about 240 kilometers (149 miles), and an average width of 25 kilometers (15½ miles). To the north and south of this central zone, there are many other mines of less importance.

The principal deposits of the province consist of cupreous iron pyrites, and the largest masses are those called "Rio Tinto," "Tharsis," "La Zarza," "Sotiel Coronada," "Lagunazo," "San Miguel" and "Confesionarios." There are also deposits of manganese ores in close proximity to the cupreous iron pyrites deposits, and silver-lead and antimony lodes, etc., but these latter have not thus far been developed.

CUPREOUS IRON PYRITES DEPOSITS.

In order to illustrate the general character of the ore found in those deposits, and the *modus operandi* of the different companies, which, it may be stated, is much the same at all the mines, especial reference may be made to a few of the principal ones.

Rio Tinto mines.—These mines were formerly the property of the Spanish Government. For the last ten years during which they worked them, *i. e.*, from 1863 to 1872, the production was 640,337 tons of mineral extracted and treated and 10,193 tons of fine copper made. By royal decree of June 25, 1870, these mines were put up for sale, and were purchased on behalf of Messrs. Matheson & Co., of London, for the sum of 92,800,000 pesetas (\$17,794,600). In a short time after taking possession of the property, a narrow-gauge railway was built, connecting the mines with the port of Huelva, a distance of 84 kilometers (52 miles), and a magnificent pier was built measuring 579 meters (1,900 feet) in length, divided into three

floors, facilitating the operation of loading and discharging, this pier costing approximately 5,000,000 pesetas (\$995,000). At the same time, active preparations were commenced at the mines for the removal of the overburden in order to extract on a large scale by open cast. The following analysis of ore exported from the Rio Tinto mines will give a fair idea of the class of the great bulk of export ore contained in the deposits:

Constituent.	Per cent.	Constituent.	Per cent.
Copper.....	3.42	Arsenic.....	0.21
Sulphur.....	48.00	Lime.....	0.21
Iron.....	40.74	Magnesia.....	0.08
Silica.....	5.67	Oxygen.....	0.09
Lead.....	0.82	Moisture.....	0.76

The quantities produced by this company, since the mines were taken from the Government, are as follows:

Year.	Extraction.	Exported.	Treated locally.	Copper.	Fine copper in precipitate and matte.
	<i>Tons.*</i>	<i>Tons.*</i>	<i>Tons.*</i>	<i>Per cent.</i>	<i>Tons.*</i>
1873.....	} (†)	(†)	(†)	(†)	1,567
1874.....					
1875.....					
1876.....	349,158	180,962	151,196	2	976
1877.....	771,751	251,360	520,391	2.37	2,495
1878.....	871,107	218,818	652,289	2.37	4,184
1879.....	906,600	243,241	663,359	2.46	7,199
1880.....	915,157	277,590	637,567	2.7	8,556
1881.....	993,047	249,048	743,949	2.75	9,469
1882.....	948,231	259,924	688,307	2.805	9,140
1883.....	1,090,973	313,291	786,682	2.95	12,295
1884.....	1,369,918	312,028	1,057,890	3.234	15,868
1885.....	1,351,466	406,772	944,694	3.102	10,261
1886.....	1,378,381	336,548	1,041,833	3.046	15,656
1887.....	1,182,438	362,796	819,642	3.047	12,365
1888.....	1,458,207	398,412	1,059,795	2.949	16,139
1889.....	1,214,323	389,943	824,380	2.854	18,708
1890.....	1,261,754	396,349	865,405	2.883	19,183
1891.....	1,436,087	464,027	972,060	2.649	21,227
1892.....	1,402,063	406,912	995,151	2.819	20,017
1893.....	1,332,002	477,656	854,346	2.996	20,887

*Metric tons of 2,204.6 pounds.

† Period of preparation.

The great bulk of the ore exported is sent to England and other European countries, but as will be seen from the note of exports further on, the Rio Tinto Company have, of late years, sent a good proportion of ore to the United States, although this ore contains a low percentage of copper. The copper precipitate and matte produced at the mines is all sent to Great Britain, to be smelted principally at the company's extracting works.

At the Rio Tinto mines, the ore is divided into three groups or classes. By far the greatest proportion of the ore is not suitable for export, owing to its low copper contents. This class is all reserved for treatment at the mines,

with the exception of that sent to the United States. The next, a richer class containing from 2 to 4 per cent copper, is the export ore, and the third group is made up of very rich ore containing 6 per cent and upwards of copper, this being smelted at the mines from which matte is obtained. The first-mentioned class, the poorest ores, are the first calcined in the open air (although of late years most of the companies have abolished this system and treat the ores raw) in piles of 300 to 400 tons, these piles being allowed to burn for six or seven months. After the sulphur is burnt off, these piles are pulled down, and part of the burnt ore is dumped on the general heaps and part into tanks to be washed with water. For the cementation of the copper liquors, which result from this washing, pig and scrap iron is used. The precipitate of copper thus obtained contains on an average 60 to 70 per cent of copper, and is exported in bags to European countries to be refined. The matte obtained by the smelting process is also exported to England.

Tharsis mines.—The Tharsis Sulphur and Copper Company (limited) was formed twenty-seven years ago, and acquired the Tharsis and La Zarza mines. This company has also, quite recently, acquired the Lagunazo property.

From the following analysis, it will be seen that the character of the Tharsis ore is much the same as that of the Rio Tinto mines :

Constituent.	Per cent.	Constituent.	Per cent.
Copper.....	3. 73	Magnesia.....	0. 10
Sulphur.....	47. 43	Oxygen.....	0. 44
Iron.....	41. 30	Silver.....	0. 01
Silica.....	3. 68	Cobalt.....	0. 06
Lead.....	0. 58	Antimony.....	0. 14
Arsenic.....	0. 33	Sulphuric acid.....	1. 40
Lime.....	0. 67	Organic matter.....	0. 13

The following are the quantities (in metric tons of 2,204.6 pounds) produced since the Tharsis Company acquired the properties :

Year.	Extracted.	Local treatment.	Exported.	Year.	Extracted.	Local treatment.	Exported.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
1867-68.....	243,512	151,621	91,891	1882.....	423,949	219,438	204,511
1869.....	180,737	83,500	97,234	1883.....	429,293	218,119	211,174
1870.....	287,711	103,200	184,511	1884.....	449,532	236,528	213,004
1871.....	334,897	127,450	207,447	1885.....	507,554	303,341	204,213
1872.....	333,460	107,450	226,010	1886.....	502,442	238,875	263,567
1873.....	227,868	90,270	137,598	1887.....	568,194	280,989	287,205
1874.....	402,373	130,200	272,173	1888.....	382,109	210,687	171,422
1875.....	410,050	159,802	250,248	1889.....	275,979	208,866	67,113
1876.....	379,285	174,409	204,876	1890....	244,917	201,049	43,868
1877.....	481,291	231,992	249,299	1891.....	228,763	196,274	32,489
1878.....	321,102	118,648	202,454	1892.....	245,837	211,929	33,908
1879.....	353,432	206,147	147,285	1893.....	299,666	267,439	32,227
1880.....	338,558	155,870	182,688	1894.....	333,896	301,672	32,224
1881.....	234,628	72,263	162,365				

La Zarza mines.—The production at the La Zarza mines has been as follows:

Year.	Local treat- ment.	Export.	Total ex- tracted.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
1867-1888.....	1,057,605	148,279	1,205,884
1889.....	101,676	191,180	292,856
1890.....	24,581	208,612	233,193
1891.....	109,071	229,005	338,076
1892.....	59,679	195,678	255,357
1893.....	118,484	199,672	311,156
1894.....	78,393	176,138	254,531

The Tharsis Company's product is all shipped to European ports, and is mostly treated at their own extracting works in Great Britain. They have not up to the present exported to the United States.

The company treat their poor ores in the same way as the Rio Tinto, but of late they have abolished the system of calcination in the open air, treating the ores in their raw state. As has already been pointed out in the remarks on the Rio Tinto mines, most of the companies have now done away with the primitive method of calcination in the open air, principally owing to the great agitation raised against it by the land proprietors during the years 1887-88, which ended in the Government prohibiting the system on account of the great damage caused to vegetation. Although the Govern-ment afterwards repealed its prohibitory measure, when the agitation had abated, most of the companies abandoned the system altogether, thus avoid- ing the payment of heavy indemnities for damage to crops, and at the same time getting rid of great annoyance.

The method of treating the ores in their raw state appears to give satis- factory results, and although the ore in this state does not sulphatize so readily, and consequently does not give off its copper contents so quickly as when the ore is calcined, it has been found that by first passing the water over the old burnt heaps mixed with a proportion of small crude ore the liquors are pure and consume less pig iron in the precipitation depart- ment owing to the absence of iron salts. An additional advantage also is that the sulphur is preserved in the ore, and may be utilized at some future time instead of being thrown off into the air by open air calcination. The consumption of pig iron is from 1½ to 2 tons per ton of fine copper pro- duced.

Confesionarios mines.—These mines are situated about 67 kilometers (41.6 miles) north of Huelva. The mineral extracted from these mines forms an exception, and in fact occupies quite an unique position among the other pyrites mines of the province. The peculiarity of this mass is that it contains no copper, although it is situated in the same central zone. It is, therefore, almost pure iron pyrites, containing 50 per cent of sulphur and the remainder iron. In the year 1886, this property, which had previously been abandoned by several foreign companies who were in search of copper, was bought by



a French company. The close proximity of these mines to the Zafra-Huelva Railway, enables the company to bring down the ore to the port of Huelva under very economical conditions, thus compensating for the very low price obtained for this class of ore. The mines have produced the following quantities (in tons of 2,2046 pounds):

Year.	Quantity.	Year.	Quantity.
	<i>Tons.</i>		<i>Tons.</i>
1886.....	9,026	1891.....	184,470
1887.....	55,293	1892.....	215,400
1888.....	91,776	1893.....	224,108
1889.....	171,919	1894.....	292,720
1890.....	170,158		

The ore is all exported—mostly to European countries—and a good proportion to the United States.

The exports in 1894 were: To Europe, 241,780 tons; to the United States, 50,940 tons; total, 292,720 tons.

The following is a percentage analysis of the ore found at these mines: Sulphur, 53.15; iron, 46.60; silica, 0.20; arsenic, 0.02, and traces of copper, gold, and silver.

MANGANESE DEPOSITS.

Manganese deposits rank next in importance to the pyrites deposits. These deposits began to be worked, on a large scale, about the middle of the present century; since then, this branch of mining industry has passed through alternate periods of prosperity and depression. The climax of its prosperity was reached in 1867, when a total of 41,000 tons were exported through the port of Huelva and different shipping places on the Guadiana. At that time, this class of mineral was principally consumed in the chemical manufactories in Europe. From 1867, the exports began to fall off considerably until in 1874, owing to the Weldon process having been introduced in all the chemical works, and it seemed as though this branch of mining had come to an end. In 1878, however, steel manufacturers began to use this mineral, but instead of buying the ore on the basis of its contents in peroxide, as the chemical manufacturers had done, they required the price to be fixed according to its contents in metallic manganese. The demand infused new life into the business for a time, but the steel makers soon began to place difficulties in the way, owing to the high percentage of silica in the ore, and the price accordingly gradually decreased. Besides this, fresh deposits of manganese of a better class were discovered in the Caucasus and other countries, and were supplied at lower prices, for which reason it is hardly possible to-day to continue working the deposits of this province. The price paid, free on board at Huelva, when steel manufacturers began to seek this mineral here, was 2½ pesetas (49.2 cents) per unit of metal, so that ore containing 50 per cent metal was worth 125 pesetas (\$24.13) per ton; to-day the price is about 1 peseta per unit, or about 50 pesetas (\$9.65) per ton.

SHIPPING FACILITIES.

Of late years, numerous lines of railways have been made to connect the mines with the port of Huelva, and to meet the necessities of the increased development of the mines. Both the Rio Tinto and Tharsis companies have private narrow-gauge lines for the transportation of their products to Huelva, the former being 84 kilometers (52 miles) long, and the latter 46 kilometers (28½ miles), besides 30 kilometers (18.6 miles) more for a branch line to Zarza. There is also a narrow-gauge line from Zalamea to San Juan del Puerto on the river Tinto, a distance of 57 kilometers (35.4 miles). As this line passes near several pyrites and manganese deposits, considerable quantities of ore are brought down by it. In the more westerly part of the province, there is another narrow-gauge line from the Caveras del Pasto group of mines to a point called La Luja, on the river Guadiana. Besides these narrow-gauge railways, there are the two public railways for general traffic of the Madrid, Zaragoza, and Alicante companies, and the Huelva-Zafra company.

Piers.—As has already been mentioned, the Rio Tinto Company constructed their pier at a cost of about 5,000,000 pesetas (\$965,000). The Tharsis Company have also a very fine pier, 800 meters (3,150 feet) long, which cost approximately 1,250,000 pesetas (241,250). At these piers, steamers of 1,500 tons can be loaded in one day. There is also the town pier for public service. The ore from the Confesionarios mines and the products of other small mines is shipped at this pier. At San Juan del Puerto, above mentioned, the terminus of the line from Zalamea, and distant from Huelva 12 kilometers (7½ miles), there is a small jetty for the shipment of the product into barges, which is transhipped into steamers at the mouth of the river Tinto which flows into the Odiel, the Tinto not being navigable for steamers.

DIVIDENDS.

The dividends declared for a series of years were :

Year.	Rio Tinto Company.	Tharsis Company.	Year.	Rio Tinto Company.	Tharsis Company.
	<i>Per cent.</i>	<i>Per cent.</i>		<i>Per cent.</i>	<i>Per cent.</i>
1868.....		10	1881.....	14	25
1869.....		11½	1882.....	14	25
1870.....		5	1883.....	14	27½
1871.....		10	1884.....	8	27½
1872.....		20	1885.....	5½	20
1873.....		40	1886.....	3	10
1874.....		25	1887.....	10	7½
1875.....		25	1888.....	17	10
1876.....		22½	1889.....	10	20
1877.....		20	1890.....	16½	22½
1878.....		17½	1891.....	10	12½
1879.....	5	16½	1892.....	7	15
1880.....	8	20	1893.....	7	12½

The Confesionarios (Aguas Teñidas Company) declared a dividend of 8 per cent in 1893.

CAPITAL EMPLOYED.

English:

Rio Tinto Company—		
325,000 shares, at £10 each.....	£3,250,000 =	\$15,814,500
5 per cent mortgage bonds.....	2,034,060 =	9,897,736
5 per cent second mortgage bonds.....	1,068,840 =	5,200,975
Total Rio Tinto.....	6,352,900 =	30,913,211
Tharsis Company.....	1,250,000 =	6,082,500
Bede Metal Company.....	250,000 =	1,216,500
Total English capital.....	7,852,900 =	38,212,211

Pesetas.

French (Aguas Teñidas Company).....	10,000,000 =	1,930,000
Portuguese:		
San Miguel.....	1,538,888 =	297,005
Sotiel Coronada.....	7,500,000 =	1,447,500
Total French and Portuguese.....	19,038,888 =	3,674,505
Grand total.....		41,886,716

The foregoing is the capital employed by the principal companies with limited liability, and whose reports are published. A good deal of capital is also invested by private individuals in manganese, mining, etc., but there are no means of ascertaining the amounts.

LABOR.

From the Government statistics, given further on, will be seen the number of persons employed. The daily wages earned are approximately as follows: Miners, 4 to 5 pesetas (77.2 to 96.5 cents); laborers, 2½ to 3 pesetas (48.2 to 57.9 cents); boys, 2 pesetas (38.6 cents); women, 1½ to 2 pesetas (29 to 38.6 cents). With the exception of the managers, chiefs of departments, and a few skilled workmen, native labor is employed.

ORE EXPORTS TO THE UNITED STATES.

Up to the present, there are only two companies that have exported to the United States. The following are the quantities that have been shipped by the Rio Tinto and Aguas Teñidas companies during the last four years :

Year.	Rio Tinto Co. (cu- preous iron pyr- ites, low in copper).	Aguas Teñidas Co. (iron pyrites).
	Tons.	Tons.
1891.....	33,919	16,112
1892.....	58,684	40,511
1893.....	59,248	38,721
1894.....	49,200	50,939
Total.....	201,051	146,283

It will be seen that a steady export to the United States has been maintained, both as regards the ore poor in copper from the Rio Tinto mines and the noncupreous pyrites from the Confesionarios deposit worked by the Aguas Teñidas Company.

It seems reasonable to assume that the lowering of the duty on iron ore and abolishing the duty on copper ores will increase the importations from this district to the United States. The shipments of iron pyrites could no doubt be greatly increased, but the Aguas Teñidas Company's mine can not produce sufficient to meet the demands. As soon as this deposit begins to show signs of being worked out, no doubt capitalists will be induced to take up other properties that are lying idle in the province. The wonder is that they have not been taken up already to meet the demand, although, perhaps, none of them will be able to produce such pure iron pyrites as the Confesionarios mine.

MINING LABOR.

The following table, taken from the statistics compiled by the mining department in Madrid, shows the number of workers employed during the years ending June 30, 1891, 1892, and 1893 :

Year.	Men.	Women.	Boys.	Total.
1890-91.....	16,660	516	2,160	19,336
1891-92.....	14,661	505	1,862	17,028
1892-93.....	13,147	511	1,666	15,324

CHAS. L. ADAMS,
Consul.

CADIZ, February 15, 1895.

CLIMATE AND PUBLIC HEALTH OF MALAGA.

The "oldest inhabitant" in Malaga declares that he has not seen, for thirty-five years, such a winter as the last for cold and rain and clouded skies. In the city itself, however, there was no frost, except three or four times in very exposed places, and these so slight as to be scarcely noticeable. The most tender plants, though exposed, have been untouched by frost, while roses, violets, and other flowers have bloomed during the whole winter. The lowest temperature as recorded by the Geographic Institute in this city for the months of December, January, and February, respectively, was 44½°, 38⅓°, and 47° F. The highest recorded during the same months was 68°, 63°, and 69½° F. The average for the three months was 55½°, 51⅓°, and 57° F., respectively; yet, on account of the great rainfall, the number of cloudy days, and the disagreeable and cold winds, the people felt the cold very much. The houses not generally being built with chimneys, the cold was more severely felt than in northern climates where every-

thing is ready for a freeze. Even should the sun shine every day, thousands in the city would never feel the warmth of its rays in their homes, because of the narrowness of the streets and the height of the houses.

From September 1, 1894, to March 1, 1895, that is for six months, there were but fifty-five clear days—days with sunshine—of which twenty-seven were in the months of September and October, leaving but twenty-eight for the other four months. During this time, there were thirty-eight rainy days—rain all day—twenty-three partially rainy days, thirty-one cloudy days, thirty-four partially cloudy days, and several days of cold disagreeable winds, which are known as the *Teiral*, generally occurring on clear days.

The absence of frost and snow in the city, while there was snow on the mountains about Malaga, shows that compared with other places in the province, or other places in about the same latitude along the coast, or even in northern Africa, the weather in this city was not severe, though disagreeable. The heavy rains have played havoc with the farmers owning lowlands throughout the province, as the seeds sown have, to a great extent, rotted in the ground, while the frost has, it is said, ruined many fields of sugar cane. Great distress prevails partly for these reasons among the farmers.

It is said by persons who have long resided in this city, that the climate has been gradually undergoing a change for some years. This opinion is based on a comparison of the opening of the vintage season now and fifteen or twenty years ago. This change, it is said, is particularly noticeable since the earthquake of 1884. Fifteen years ago, the season for grape picking and almond gathering began early in the month of August, while now scarcely anything is done in respect to the vintage or almond gathering till about the middle of September.

Notwithstanding these drawbacks, there seems to be no reason why Malaga should not become what it is called, the "pearl of the Mediterranean." Were the streets in certain parts of the city kept clean, especially in the parts where the poorer people live; were better sanitary measures carried out; were there good hotels to accommodate travelers without overcharging; were there drives, and parks, and gardens, and places of amusement, there is no reason why Malaga, with such a mild winter climate, should not be one of the very best places in Europe for invalids to pass the winter in.

There is a project now on foot to build a large hotel, lay out parks, gardens, etc. The work is to begin this summer under some French engineers, with a cost to start with of 5,000,000 francs (\$965,000).

MORTALITY.

Notwithstanding the city is far from being as clean or as well kept as it ought to be, there is no epidemic or predominant disease, with the exception of *dengue* (influenza), which was caused by the unusually bad winter.

Statement showing the mortality in Malaga during the five months ending with February 23, 1895.

Cause of death.	October.	November.	December.	January.	February.	Total.
Homicide.....	2	2	.....	4	.....	8
Suicide.....	1	2	1	.....	.....	4
Accident.....	2	.....	1	4	3	10
Leprosy.....	1	.....	1	.....	.....	2
Cancer.....	9	8	8	4	6	35
Tumor.....	2	2	2	.....	15	21
Diabetes.....	13	8	9	10	21	61
Brain softening.....	21	31	35	39	37	163
Gout, rheumatism, and dropsy.....	4	4	6	5	4	23
Gravel.....	1	5	4	3	3	16
Digestive.....	70	64	59	50	36	279
Respiratory and pulmonary troubles.....	103	115	137	184	79	618
Heart disease.....	13	53	63	73	41	243
Other infectious diseases.....	16	13	12	22	25	88
Dysentery.....	1	.....	1	3	1	6
Intermittent fever.....	4	2	1	3	.....	10
Puerperal fever.....	3	1	1	2	.....	7
Typhoid fever.....	6	3	8	4	2	23
Convulsions.....	5	.....	1	3	1	10
Diphtheria.....	12	26	15	13	4	70
Scarlet fever.....	.....	.....	3	1	1	5
Measles.....	1	.....	.....	1	1	3
Smallpox.....	3	6	6	8	5	28
Total.....	293	345	374	436	285	1,733

The foregoing table, for which I am indebted to the courtesy of Señor Don Fernando Camino, mayor of this city, gives the number of deaths and the cause of each from October 1 to February 23. The deaths from February 23 to March 1 were 78, making in all for the five months, 1,811.

It may be noted that the highest mortality occurred in the month of January, there being 436 deaths out of a probable population of 135,000.

The mortality was chiefly among the poorer people, owing to the severe cold, for which they were not prepared, being thinly clad, exposed to heavy rains, and with no means of heating their houses

DESTITUTION.

A great deal of the existing suffering and want among the poor people of the city was, and is owing to the strike in one of the cotton mills, which began in the early part of September last and continued for nearly four months, by which nearly 4,000 people were thrown out of employment. The destitution among the farmers is due partly to poor crops, partly to frost and heavy rains, and partly to heavy taxes. The poor people throughout southern Spain suffered to such an extent during the past winter that the general government recently voted a large sum to be distributed among the towns as a temporary measure of relief. The sum allotted to the Province of Malaga was 80,000 pesetas (about \$16,000), of which the city of Malaga received some 20,000 pesetas, which was expended in public works, thereby

employing some of the destitute laborers and relieving their dire distress for the time. The balance of the 80,000 pesetas was divided among the people of 105 towns and villages in the province, the lowest sum given to any of the villages being 63.65 pesetas (\$12.73); the highest, after the city of Malaga, being 4,123.05 pesetas (about \$824.61). While want and destitution have been prevalent for the past three or four years in the city, and also among the farming population, yet it had not reached the intensity which now exists and has existed for the past five months in this city and province.

EMIGRATION.

In consequence of this condition of affairs, there has been a large exodus from the province of Malaga for three or four years past, mostly to southern Brazil and the Argentine Republic. It is estimated from one source that about 18,000 have left this port from the Province of Malaga during the past four years. From another source, the number is placed at 8,847, besides those who took passage from Gibraltar. The former may include those who went both to Brazil and the Argentine Republic from here and Gibraltar, which may account for the difference in the figures from the two sources. The cause assigned for the emigration of the farming population is said to be partly to the burdensome taxation imposed by the Government, and partly to the failure of vineyards through the ravages of the phylloxera, as well as to other causes, while inability to obtain work drives the people from the cities to foreign countries.

DAVID N. BURKE,
Consul.

MALAGA, *March 15, 1895.*

A NEW GERMAN LAMP.

Referring to my previous report on the incandescent lamp,* I have the honor to report a new invention which is making a stir in the press of Berlin, and which has been personally examined by the Emperor. It consists of a burner like that of the incandescent lamp before reported, in so far as the cotton "hood," or "stocking," impregnated with chemicals is concerned which gives the light its color and steadiness. The former lamp, however, is used for ordinary illuminating gas, and the burner is adjusted to the ordinary gas jet. In the new invention, the gas consists of the fumes from dealcoholized spirit, an article which is very cheap in Germany. The recent sudden rise in the price of petroleum has given this invention peculiar prominence in the newspapers, and the Emperor is said to have remarked on the possibilities it offers of opening a new and large field for the consumption of potato spirit, which, in a literal sense, is just now a drug on the market.

* Published in the series, "Monazite in Foreign Countries," printed in CONSULAR REPORTS No. 179 (August, 1895).

In order to induce the fumes to rise from the spirit into the incandescent "hood," a hollow metal rod with two elbows like an inverted U is arranged over the bowl of the lamp so that the two arms descend to the fluid; a wick is passed through this arm, and underneath the arm is placed a simple straight tube with wick, which also descends to the spirit. As soon as this wick is ignited, the long arm begins to get warm above it and the fumes of the spirit begin to assemble in the arm and pass up through a small hole on the upper side into the hood, where it can be ignited. To quench the light, it is only necessary to blow out the little wick below the arm, whereupon the latter gets cold, gas ceases to form, and the incandescent hood above ceases to operate.

At present, the cost of this lamp is too great to warrant a wide use of it. A complete lamp costs about \$5 and the apparatus to be adjusted to a petroleum lamp costs about \$3. But these prices are sure to fall rapidly if the public takes to the invention. Another drawback is the danger of explosions. Although the makers of the lamp claim that there is none, it is not clear how explosions can be avoided in cases where the user lacks experience or intelligence.

The fluid used is what is called *denaturiert*, or chemically changed spirit which volatilizes at a low temperature and does not have to pay the high tax with which ordinary spirit is burdened. In 1885, Germany exported spirit to the amount of 89,000 tons, valued at 28,000,000 marks. Since then, the export has fallen, year after year, till in 1890 it was 38,000 tons, valued at 14,000,000 marks, and in 1893, only 16,000 tons, valued at 4,000,000 marks. On the other side of the question, petroleum has been imported with a constant increase. In 1885, there were 482,000 tons, valued at 69,000,000 marks; in 1890, there were 664,000 tons, valued at 73,000,000 marks; and in 1893, there were 765,000 tons, valued, to be sure, at a lower price, namely, 47,000,000 marks.

In the last ten years the increase of imports of petroleum is figured at over 160 per cent, while the decrease of exports of spirits is calculated to amount to 21 per cent.

CHARLES DE KAY,
Consul-General.

BERLIN, *May 25, 1895.*

FRUIT EVAPORATORS IN GERMANY.

In connection with my report on "Dried Apples in Cologne," under date of February 9, 1895,* my attention has been particularly attracted by the very large number of fruit-evaporating apparatus of various constructions exhibited at the Exposition of the German Association of Agriculturists, held recently in Cologne. I noticed that the grates of all these apparatus were made of zinc. One exhibitor—Val. Waas, of Geisenheim-on-the-

* Printed in CONSULAR REPORTS No. 175 (April, 1895), p. 535.

Rhine—prints in his prospectus that he is the sole manufacturer entitled to make the “Wander” evaporator used in the Royal Institute for fruit and wine culture at Geisenheim. The trays of this so-called improved evaporator are made of zinc. This is highly interesting, in view of the order issued by the municipal authorities of this city, as reported by me, which reads as follows :

It [the municipal order] asserts, further, that the presence of zinc is due to the fact that the apple slices from America are not dried, as is done here [in Germany], on wooden racks, but on zinc netting.

In the prospectus of Val. Waas, of Geisenheim, a copy of which is herewith inclosed, it will be observed that the yearly production of fruit evaporators by this firm is four thousand.

I may add here that, since the municipal order has been issued, I have noticed that some of the dealers in this city have marked “zinc free” on the cases of dried-apple slices they offer for sale, indicating that the apple slices do not contain any zinc.

It may be interesting to give, in this connection, a complete translation of the order issued by the municipal government, which is as follows :

AMERICAN DRIED-APPLE SLICES.

There is an abundance of dried-apple slices, especially from America, offered for sale here that contain a larger or smaller quantity of zinc. Of thirteen samples selected for examination, eleven showed the presence of zinc. The presence of zinc is to be attributed to the drying of the apple slices in America on zinc netting instead of on wooden racks, as is done here. There is formed in the apples maltate of zinc, which has a similar action to that of lactate and sulphate of zinc. These compounds belong as medicaments to the so-called “Separanda” (poisons), and may be sold by apothecaries in very small quantities only when prescribed as medicine. According to the opinion of experts, the eating of such apples can undoubtedly be injurious to the health, especially when prepared as food for children and convalescent persons whose systems are not so capable of resistance. Even the presence of a very small percentage of maltate of zinc is very easily capable of producing a derangement of the health, consisting in affections of the stomach, vomiting, and, when often partaken of, in chronic lead poisoning. I am, therefore, obliged to give strict warning against the sale, purchase, and the eating of American dried-apple slices, and hereby make known to all who offer such article for sale that they will be proceeded against in accordance with the imperial law regulating the trade in food and food products of May 14, 1879.

Some of the importers, believing the above to be an unfair discrimination against the American dried-apple slices, called upon the mayor and begged that a modification of the order be made, which was acceded to in a second announcement as follows :

AMERICAN DRIED-APPLE SLICES.

My publication of the 6th instant has, on various sides, given rise to the opinion that the use of American dried-apple slices was in every case injurious to the health, and that the sale of this article was contrary to law. This is in no wise the case. On the contrary, the publication has no reference to American dried-apple slices, which have not been dried on zinc plates and zinc wire netting, but on wooden racks and wickerwork, and which do not contain such an amount of zinc as would be injurious to health.

It will be observed that the above announcements seem to be directed solely against American dried-apple slices. So far as I have been able to ascertain, the matter is under investigation here as to whether the mere traces of zinc in the dried-apple slices are to be considered unwholesome, or whether their sale should only be allowed when they are entirely free of zinc.

The United States consul at Mayence has called my attention to an article published in the Frankfort Zeitung of the 31st of May last on the same subject, which, in English, reads as follows:

FRANKFORT, *May 30.*

In the court of justice. The sitting began with an objective proceeding without any of the accused being present. The subject of the proceedings was apple slices which were confiscated by the police authorities last autumn in various provision stores here (Frankfort) and in Roedelheim. According to the opinion of Dr. Homeyer and Health Councilor (*Sanitäts-rath*) Dr. Klingelhoeffer, these American apple slices are injurious to health on account of the admixture of acetate of zinc, as this admixture, which is intended to give them a bright color, produces vomiting and diarrhea in children and digestive derangements in adults.

The court orders the confiscation of this article on account of its injurious quality for which the sellers are not held responsible.

In conclusion, I am informed that the dried-apple slices sold here are almost exclusively from the United States, and since this cry against their unwholesomeness, the importers are taking care in placing only a "zinc-free" article in the market. In a recent conversation with Dr. Jacobsthal, a sworn chemist to the court here, he says that the samples submitted to him last May by the city authorities here for analysis were all "zinc free."

WM. D. WAMER,
Consul.

COLOGNE, *June 14, 1895.*

AMERICAN DRIED APPLES AT HAMBURG.

On the 18th of May, 1895, Consul Robertson, of Hamburg, reported to the Department that he had applied to the Hamburg Foreign Office asking that directions be given to the proper officials to promptly advise him of any instance where objection was made to the importation of American dried apples, on the ground that they were alleged to contain zinc, and that he be put in a position to secure suitable samples of the fruit for the use of the United States authorities.

In a subsequent report, dated June 29, Consul Robertson says:

I am now in receipt of a communication from the chief of the Hamburg Foreign Office, advising me that he has instructed the police authorities to furnish me with samples and analyses of any American dried apples which may in the future be confiscated on the ground that they are alleged to contain zinc.

GERMAN MACHINES FOR THE UNITED STATES.

The Chemnitz Chamber of Commerce has been displaying unusual activity recently in regard to trade with the United States. The leading journal of the city—the organ of the manufacturers—devotes columns daily to the discussion of every question that relates to commerce with our country. The eagerness of these people to get colonial, as well as continental trade, is indicative of a commendable spirit of enterprise. Last week a meeting was held here, the object of which was to send out agents to “drum up” and secure trade in the African colonies. Yesterday, at a large meeting of cotton manufacturers, I saw a subscription book passed around and signed by every man present for sums intended to aid in defraying the expenses of the colonial enterprise. The interest of these men was indirect; still, they signed, conscious that the gain of the exporters must end in the gain of the home manufacturers.

I have before me a four-column article on the “Prospects of Exporting German Machinery to the United States of America.” The article is exhaustive, covering the question in its minutest details. It begins by telling the Germans that their share in the imports of machinery to the United States during the year 1892–93 was \$240,253; that it compares with other countries as follows: England, \$2,804,075; Scotland, \$89,546; Sweden and Norway, \$87,860; France, \$51,145; Switzerland, \$37,041; Belgium, \$19,810; Ireland, \$12,813; Italy, \$2,746; Holland, \$2,303; Austria-Hungary, \$2,080; Denmark, \$689; Spain, \$51.

Compared with her principal competitor, England—the one, too, let me say, that she is so eager to overtake—the figures are :

Year.	Germany.	England.
1889.	\$143,538	\$2,049,147
1890.....	309,131	2,148,953
1891.....	340,990	2,052,077
1892.....	289,239	2,263,290
1893.....	240,253	2,804,075

The interesting problem now is to find a way of getting a larger share of this trade so long enjoyed by England. No matter about England’s favorable natural advantages, and the long time in which she has been selling; no matter that Americans are not inclined to buy foreign-made machines; there is now and will be, for a long time, a fair market for certain machines, viz, rotation presses, protected by patents, for fine illustration purposes; special machines for beet-root sugar, cement, and safety match production; also, for machines in the production of which, because of limited demand (in the United States) and limited supply of skilled labor—*i. e.*, labor familiar with the machine’s construction—the United States, as yet, have done

nothing. In spite of the import duties, machines may be exported to the United States with profit, provided the prices are low enough, with delivery on time, and absolute certainty guaranteed that parts of machines, in case of breakage, will be supplied from stores in the United States. Manufacturers are urged to keep the machines they make in certain sizes, so that the keeping of reserve parts, sample and sale rooms may be possible at small expense in all the large centers. Then follows three columns describing United States methods, energy, and activity, what merchants and manufacturers want, how they like to take machines on trial, etc. The article to which I refer is only one of a long series now running in the leading local paper.

J. C. MONAGHAN,

CHEMNITZ, *June 22, 1895.*

Consul.

RETAIL AUCTION SHOPS IN LUXEMBURG.

A circular letter, signed by eighteen leading Luxemburg firms, has recently been addressed to the merchants of this city, calling upon them to unite against a form of ruinous competition which has recently made its appearance here as a result of overproduction in the textile industry of central Europe and the consequent accumulation of stocks in the warehouses of manufacturers and wholesale dealers. As this circular seems to throw light upon the condition of business in this section of Europe and points out a danger which may menace the welfare of reputable merchants in our country, I have the honor to translate such paragraphs as appear to me to have a general interest:

It is a sad fact that during several years past the condition of all retail business has been very unsatisfactory here as well as in the neighboring countries of France, Belgium, and Germany.

The great overproduction in all branches of industry and the consequent accumulation of stocks; the threatening clouds arising from time to time on the political horizon; the widespread discontent aroused by socialistic agitation, and the unfavorable news received from other parts of the world are the causes of the crisis now prevailing in central Europe in all branches of business.

To these misfortunes another has recently been added which threatens a complete revolution in retail business. As the locust threatens the fields, or as the *Phylloxera vastatrix* threatens the vineyards, so all retail business is threatened by a new sort of retail auction shop. In nearly every town of Germany, France, and Belgium such shops have been opened, to the great injury of local trade.

Large and expensive advertisements are scattered broadcast to inform the public of the sale of masses of so-called auction wares. In reality, though, these are old-stock wares which it is desired to dispose of at any price, or they are, in some cases, worthless wares manufactured especially for this purpose.

In France, Belgium, and Germany drastic measures have been adopted against these swindlers. In all cities, the established firms have united and made common cause against these dangerous competitors, and their efforts have been successful. Their united strength

has succeeded in keeping the auction-house merchants within certain bounds. New laws have been made which partially protect honest mercantile houses and the purchasing public.

The circular closes with an earnest appeal to every honest business man in the city to join the "Luxemburg Merchants' Union."

GEORGE H. MURPHY,
Vice-Commercial Agent.

LUXEMBURG, *July 5, 1895.*

AMERICAN VS. EUROPEAN TRADE SYSTEMS IN BRAZIL.

The efforts of our manufacturers and merchants to secure a market here for their goods or products are far from being what they ought to be, and are many years behind those of Europe.

Some of our great firms spend hundreds of dollars in printing circulars and catalogues to send here for the purpose of working up their trade, or of introducing their goods. My experience and observation warrant me in making the statement that the people here do not rely upon advertisements relative to something they have never seen, or of which they know nothing. They want something practical—something that they can see and handle. Another thing is that our firms seem to forget that the language of Brazil is Portuguese and not Spanish. Advertisements in Spanish sent here are simply thrown in the wastebasket. If any literature is sent at all, it should be in the language of the country.

I have received many letters from merchants in the United States, asking for names of firms here handling certain kinds of goods for the purpose of sending printed matter to them, and I have also received letters from others asking for information which would cost many dollars in railroad fare to secure. While I recognize the fact that a consul should do all he can to encourage and aid our merchants and manufacturers, it can not be expected that he should involve himself in monetary outlay; hence efforts of this sort on the part of the merchant to get a business foothold here must fail.

I note that the European system is very different. European merchants either open branch houses here for the introduction of their goods on the market, or they send their goods on consignment to responsible firms or persons already established here. In this way, they never fail. A great proportion of American goods is sent here from Europe by European merchants who buy from the United States, reship and resell to this market and make a big profit. In this, it seems to me, the United States are a manufacturing establishment for the Europeans, who make profits which the Americans themselves should realize. While this may give a market, indirectly, to American goods, others reap the profits therefrom. To facilitate the extension of American trade, and to give our money a greater value, an American

bank is much needed here. A five-dollar gold piece is not worth more here than a pound sterling (\$4.866). English gold is well known to the people here, but there are hundreds of them to whom the American half eagle is unknown. American gold is exchanged for Brazilian money on the basis of a pound sterling for every five dollars (gold). This inequality can, I think, be remedied only by a bank that will do business here on the basis of the American dollar instead of the pound sterling, otherwise Europe will continue to get the advantage of 13.4 cents out of every five dollars.

HENRY C. SMITH,
Consul.

SANTOS, *June 26, 1895.*

AMERICAN COTTON GOODS IN JAMAICA.

Consul Eckford, of Kingston, Jamaica, in his annual report for the fiscal year ending March 31, 1895, transmitted to the Department under date of June 19, 1895, says:

The imports to this island from the United States increased \$408,070.45 during the past fiscal year, while those from the United Kingdom decreased \$410,144.23.

As I have stated heretofore, the United States is the natural market for this island, and, in my opinion, of \$10,500,000 worth of imports, the United States should supply fully three-fourths. Of cotton goods, there are \$1,475,751.66 worth imported, of which the United States furnished only \$156,269.95 worth.

One of the largest commission firms on the island, on writing to me upon the subject, expresses my views so clearly that I quote an extract from the letter:

"We feel as if the United States should supply by far the principal quantity of manufactured cotton goods that are consumed in this country, and yet, as you are aware, the quantities imported from the United States are very small in comparison with those imported from other countries. This, we are sorry to say, has been entirely due to the indifference of the manufacturers of these goods to the requirements of the trade here. As you are aware, any country that is accustomed to get its goods from a particular market has considerable prejudice against goods from any other market which differ in style and finish. The country which wishes to compete with the other having already possession of the market must, naturally, to a certain extent, humor the wishes of the consumers. In this respect, the manufacturers of the United States have proved themselves wanting in enterprise, or, perhaps, it may be, lack of desire to obtain the trade of this country. The people of Jamaica are very conservative in their tastes, and they keep continually to one particular pattern for years; for instance, of prints. Now, in the United States, the custom is, with the cheap description of prints, to print off a certain batch and either destroy or discard the rollers. Consequently, if we have samples submitted to us of particular goods and show them to our customers who are desirous of ordering, we are by no means certain that when the orders go to the United States that they can be supplied. Then, again, comes the question of the assortment of the different patterns. These, as a rule, are very few in a case, whereas in England, the cases packed for export trade contain a varied assortment. Another trouble is with the length of the pieces of the goods. The lengths of the common prints and such descriptions of goods should be 30 yards, and in England it is possible to get the goods in any reasonable length

that is ordered. The American custom is to make the pieces 60 yards, and the manufacturers will not cut into smaller lengths except at an extra cost. We believe, latterly, however, that there has been some desire to meet the wishes of the consumers in this respect, and that there has been some willingness to cut the pieces small. We think that this is one of the fields in which there is possible considerable increase in the trade relations between this country and the United States. It also appears to us that not alone in cotton goods, but in articles of general manufacture, the manufacturers of the United States have neglected this country, not being aware of the excellent field there is here for their goods."

NOTES.

Customs Regulations for the North and Baltic Sea Canal.—Secretary of Embassy Jackson, reports (Berlin, July 18), that the customs regulations for the North and Baltic Sea Canal, officially named the “Kaiser Wilhelm Kanal,” have now been agreed upon by the federal council.

The semiofficial newspapers state that according to these regulations neither articles which are customs free, if in unbroken packages, nor those on which duty is to be paid, may be discharged or loaded on board, except at such places as are designated as landing places, without special permission from the customs authorities. A ship going from a foreign port, or from a port of the Lower Elbe to the sea may pass through the canal without any customs inspections, if in charge of a pilot, or if the boat by which she is being towed has a pilot on board if she make the necessary customs declaration and carries during the trip, which must be without interruption, a designated customs signal. Steamers in charge of pilots, which are to pass through the whole canal without stopping, need not make a declaration if they carry the customs signal. In such cases the inspection of vessels bound for Kiel or Neumühlen takes place at Holtenau. The pilots of ships leaving the canal at Brunsbüttel may not leave the ships until the Elbe pilots come on board. Ships carrying the customs signal must continue their voyage without unnecessary delay, and without altering their cargo, and must refrain from any unauthorized communication with the shore or with other ships, except with regard to sending telegrams, or where it is necessary to comply with the customs regulations. If an accident makes a violation of this rule necessary, notice should be given at the nearest customs station as soon as possible. The supervision of the commerce of the canal will be exercised by officers on board of revenue cutters who are authorized to hail ships, to board them, to inspect their papers, and to search the ships. The main object of this supervision is to see that no unauthorized communication takes place with other vessels, or with the land. Captains and crews are required to obey the instructions of the customs officers, and to aid them in the performance of their duty. German war vessels and transports and foreign war vessels are not included within these provisions, no customs control being exercised over them.

International Naval Exhibition.—Consul Henry Robertson, of Hamburg (July 12) reports that from May 25th to September 30, 1896, there is to be held at Kiel an International Naval Exhibition, in connection with an

industrial exhibition of the Province of Schleswig-Holstein. The grounds chosen for the exhibition are beautifully situated along the shore of the Bay of Kiel, close to the eastern entrance of the newly opened canal, and with a splendid view of the harbor of Kiel. They measure about 350,000 square meters. Large exhibition buildings and small pavilions will be erected, as well as open and half covered galleries.

The naval exhibition is to comprise all products in any way connected with the navy or shipping in general, as well on the sea as on rivers or canals. It is also to give a complete historical review of the development and progress made in shipbuilding and all its kindred industries.

The waters of the harbor of Kiel offer excellent opportunity for showing steam or electric launches, sailing yachts, rowing boats, etc. All inquiries for information should be addressed to "The Committee of the Exhibition, 1896, at Kiel."

"Made in Germany."—Consul E. P. Crane reports (Hanover, July 19) that the British law requiring the words "Made in Germany" to appear upon all articles of German manufacture admitted to the British markets, is particularly odious to the German people. These three English words are familiar to the eyes and lips of thousands whose English vocabulary goes not a syllable farther, and the "Made-in-Germany" national trade-mark is coming to have a positive value, to the confusion and chagrin of those who legislated it into being.

What purports to be a dispatch from London to a paper in this city, states that an English journal has lately printed an article under the head of "Sharp Competition," which, it says, will be of warm interest to German manufacturers. The general purport of the paper is to the effect that the English manufacturers can no longer feel secure of their laurels. Germany and the United States have addressed themselves to the task of driving them out of the field in Cape Colony, especially in the line of hardware. The shopkeepers order enormous quantities of wares of this class from Germany, and the whole electrical plant for lighting the capital city was "made in Germany." Mayor Moorehead, of that city, is of the opinion that the odious mark has worked to the disadvantage of English interests, inasmuch as the people have become aware of the source of supply of the goods that give them such satisfaction, and are now ordering them directly from the fountain head.

The German correspondent makes this the text of a suggestion to all concerned, namely, that the manufacturers in Germany should take advantage of the notorious ignorance of the English people in the department of geography (!), especially the somewhat complicated German geography, and mark their goods as made in the several states of the Empire, as the case may be. Thus, "Made in Bavaria," "Made in Westphalia," "Made in Brandenburg," "Made in Silesia," etc., would probably stagger nine-tenths

of the British intellects that had to wrestle with the problem of the source of the goods in question.

The editor of the German paper, however, takes issue with the correspondent. He grants with perfect frankness that the German competitor has to encounter an intense national prejudice, which might, perhaps, justify this roundabout way of putting it off the scent. But, aside from patriotic and national grounds, the course proposed by the correspondent is "inconsequent." The editor claims that the course he condemns would be to tamely surrender all the trophies won under the proud banner—a banner furnished them by their industrial foe—"Made in Germany."

Hardening Steel by Gas.—Consul Monaghan, of Chemnitz, reports (June 16) that the Germans are interested in a new process for hardening steel by means of gas. The invention originated with the famous French steel and iron firm Schneider & Co., of Creuzot.

It is a well-known fact that gas, under great heat, deposits carbon in solid form. Upon this, depends its light effects, and also the formation of the so-called retort graphites, a thick covering of pure carbon on the walls of the gaslight retorts. The gas that strikes the retort walls deposits part of its carbon upon them. This is the fact on which Schneider bases his very useful invention—a process for cementing together (uniting) steel armor plates. It is said to be very important in the production of armor plates to have them comparatively soft inside and hard outside. This hardening is obtainable by the application of carbon. Formerly, the process of hardening consisted in covering the plates with layers of coal and heating them till they glowed. Schneider's process puts two plates into a furnace, one on top of the other, with a hollow space between. This space is made gas-tight by means of asbestos packing put on around the edges, and the plates are heated red-hot, while a stream of light gas is poured into the hollow space indicated. The carbon thrown out by the gas is greedily taken up by the glowing plates until they are thickly covered. The depth of this carbon covering can be regulated by the amount of gas admitted. In order to secure regular and uniform action during the process, and to prevent the pipes that carry the gas to the hollow space from absorbing any of the carbon, they are insulated in other pipes through which water is constantly circulating. It is believed that this simple and rapid carbonizing process will soon be applicable to many other branches of the steel industry.

Swiss Official Commercial Organ.—Consul Germain reports (Zurich, June 25) that this is the name of a four-page sheet, printed at the Government printing office, for the Federal Department of Commerce. It is issued regularly triweekly, and as often additionally as may be required. It is sold, postage paid, to subscribers in Switzerland for \$2.32 per annum, and to sub-

scribers in foreign countries who are members of the postal union for \$4.25. Subscriptions are taken at every post-office in Switzerland. It is purely an official commercial journal, through which the Government conveys to the Swiss people such news and statistics as may be of interest to commerce and industries. In addition to official matter, Consul Germain says that "unofficial matter" is accepted and published under proper headings, for which moderate charges are demanded. This, with the subscriptions, the consul adds, makes the paper self-sustaining, and no draft for its maintenance is made upon the Swiss treasury.

Cartagena-United States Mail Service.—Consul Clifford Smyth, of Cartagena, Colombia, in answer to a Department inquiry, reports that the mail service between the United States and Cartagena is now running on a regular basis, and is giving complete satisfaction.

Italian Fruit Exports.—Consul William H. Seymour (Palermo, July 24) reports that the average annual production of oranges and lemons in Italy, including Sicily and Sardinia, amounts to about 5,000,000 quintals,* or 10,000,000 boxes, but of these only 2,000,000 quintals are exported. The largest part of the exports goes to the United States, which takes more than 1,000,000 quintals, probably 1,500,000. The ever increasing production of oranges and lemons in the United States not only removes the hope of increasing exportation thither, but causes the fear that, at a time not far distant, Italian fruit must give way to a considerable extent to the American product; nor can the Italians hope for any increase in their exports to European countries, owing to the competition of Spain, Greece, and Algeria.

Germany, England, France, Belgium, and Switzerland, out of an importation of 1,000,000 quintals (2,000,000 boxes) of oranges and lemons, receive only one-fourth from Italy. Austria imports about 475,000 quintals (950,000 boxes) of green fruit, nearly all from Italy. Russia imports about 250,000 quintals (500,000 boxes), not quite one-half of which is from Italy, unless there is imported much of the fruit that Austria is credited with.

The Italian exporter hopes to neutralize any restriction in his exportation to the United States by having in Russia a better market for green fruit, but while he regards Russia as the most promising field for the increase of his business, he feels that the duty of 17 lire per quintal, corresponding to \$1.50 per box, is a great barrier to that end.

Supplementary Tariff of the Dominican Republic.—Consul Archibald H. Grimke writes from Santo Domingo, June 27, that the enactment on June 15,

* quintal=220.46 pounds.

1895, of a supplementary tariff which went into effect on July 1, is intended to discharge certain French claims. The consul was informed by the customs authorities of Santo Domingo that this new tariff will fall wholly upon articles imported into the country. The new law is as follows:

ARTICLE 1. To create an additional tax of 3 per cent upon the customs revenues of the Republic.

ART. 2. This tax shall be paid separately from the other customs imposts, and its collection is intrusted to the consul of His Majesty the King of the Netherlands, though it may be intrusted, by the executive power, to any other consul of a friendly nation whenever it may think proper. The collector shall render an account in duplicate quarterly to the Auditor-General of the Treasury and to the Minister of Foreign Relations.

ART. 3. The executive power shall order a separate account of the present tax to be kept until payment has been made of the obligations for the payment of which it was created.

ART. 4. This decree shall be in force from July 1 next, and shall be revoked immediately upon the payment of the special obligations which are the object of its creation.

Affairs at Guaymas.—Vice-Consul Charles E. Hale reports, July 1:

This consular district is in a prosperous condition. Crops have been good, and grazing for stock fine. The mines are making liberal shipments of ores and bullion, and the new enterprises are progressing. The big irrigating ditch on the Yaqui River is slowly approaching completion. The marine ways here are in operation, and are doing a fine business. The bonded warehouse is completed and is a very substantial stone building. A new custom-house is projected to cost \$150,000. There are at present in port three Mexican war steamers, the *Zaragosa*, the *Democrat*, and the *Oaxaca*; five coasting merchant steamers, the *Ramero Rubio*, the *Carmen*, the *Masaltan*, the *Rio Yaqui*, and the *Diego*, besides several sailing vessels, two steam tugs, two steam launches, and one American vessel, the schooner *Moonlight*. All the vessels seem to have plenty to do, and make regular trips up and down the coast. The American steamer, *Willamett Valley* makes regular monthly trips from San Francisco to this port with freight and passengers.

The Indians on the river are at present quiet, and no depredations have been reported for some time. The troops continue vigilant, and it is hoped that the small remnant of Indians still hostile will soon be subjugated.

California Products in Germany.—Secretary of Embassy Mr. John B. Jackson (Berlin, July 23) reports that an exposition of California products, in which more than one hundred firms doing business in that State participate through their agents, Messrs. Kloth, Schunemann & Co., of Hamburg, was opened July 22 in the Equitable Building in Berlin. The chief articles exhibited were wines, beers, preserved fruits, and vegetables, canned Alaska salmon, and wood and bark from the giant trees.

Earthquake-proof Houses.—Consul-General Walter S. Jones, of Rome, writes, July 23, that civil engineer Louis Dini, of Naples, has recently patented, in Italy, a plan for building houses to be proof against the action of

earthquakes. This plan consists in erecting buildings, as though they were of one piece, by means of an iron frame. This rigid and inflexible frame would not, however, suffice unless the center of gravity were maintained at the base of the edifice. Mr. Dini claims to have solved this problem. If by adopting the inflexible iron frame the building acquires a sort of organic resistance, not furnished by the ordinary system of house-building, it follows that this resistance becomes greater the moment the degree of elasticity, which must necessarily follow the displacement of the center of gravity towards the point nearest the foundations, is obtained.

Petroleum Monopoly in Germany.—Under date of July 29, Secretary of Embassy Jackson reports that the Chamber of Commerce of the city of Cassel has requested the Prussian Minister of Commerce to consider means for the prevention of the creation of a monopoly of the petroleum trade of Germany by the German-American Petroleum Company (Standard Oil Company), and has suggested, in order to make Russian competition more easy, that a reduction be made in the railway freight charges, and that steps be taken to keep the poorer oils out of Germany by raising the standard of requirements as to inflammability, etc.

Increased Duty on Liquors in Mozambique.—Consul W. Stanley Hollis, under date of June 19, reports that a decree of the Lisbon government has just been published, increasing the duty on distilled and fermented liquors imported into the Province of Mozambique. The old duty on ale, beer, and other fermented liquors was 400 reis per decaliter (43.2 cents per 2.6417 gallons); the new duty is 700 reis per decaliter (75.6 cents per 2.6417 gallons). The old duty on distilled liquors of less than 24° Cartier was 1,200 reis per decaliter (\$1.296 per 2.6417 gallons); the new duty is 1,800 reis per decaliter (\$1.944 cents per 2.6417 gallons). The old duty on distilled liquors of 24° Cartier or over was 3,000 reis per decaliter (\$3.24 per 2.6417 gallons), and the new duty is 4,500 reis per decaliter (\$4.86 per 2.6417 gallons). The importations of goods of foreign manufacture destined for use or consumption in the production of alcohol is prohibited.

Consular Reports Reprinted Abroad.—The British Board of Trade Journal, for August, reprints (pp. 149, 201, and 206) the following from CONSULAR REPORTS No. 177, for June (pp. 310, 373, and 372 respectively): “Railway Enterprise in Egypt,” report by Consul-General Penfield, of Cairo; “Foreigners in German Technical Schools,” report by Consul Monaghan of Chemnitz; “Entering Passengers’ Luggage in Venezuela,” report by Consul Plumacher, of Maracaibo.

Consular Reports Transmitted to Other Departments.—The following reports (originals or copies) were transmitted during the month of August to other Departments for publication or for proper action thereon :

Consular officer reporting.	Date.	Subject.	Department to which referred.
Edgar Whidden, St. Stephen...	July 27, 1895	Oak Bay creamery.....	Department of Agriculture.
Edward Schneegans, Saigon	June 30, 1895	Rice.....	Do.
Do.....	June 29, 1895	.....do	Do.
Do.....	Aug. 13, 1895	.....do.....	Do.
Allen B. Morse, Glasgow.....	Aug. 7, 1895	Agriculture.....	Do.

FOREIGN REPORTS AND PUBLICATIONS.

British Trade Returns.—The accounts of trade and navigation of the United Kingdom for the month of July, and for the seven months ended July 31, 1895, make the following showing of British imports and exports:

IMPORTS.

Month and seven months.	1894.		1895.	
Month ended July 31.....	£31,835,553	\$154,911,801	£35,128,142	\$170,933,539
Increase.....			3,292,589	16,021,738
Seven months ended July 31.....	242,806,918	1,181,498,463	238,801,680	1,162,008,975
Decrease.....			4,005,238	19,489,488

The following articles show an increase during the month: Articles of food and drink, raw materials for textile manufactures, raw materials for sundry manufactures, manufactured articles, metals, chemicals, dyestuffs and tannics, miscellaneous articles and parcel post, while tobacco, liquors, live animals, and oils show a decrease.

The following articles show an increase during the seven months: Manufactured articles, \$12,748,778; articles of food and drink, dutiable, \$1,726,751; oils and parcel post. Articles showing decrease during the seven months were: Articles of food and drink, duty free, \$9,312,064; raw materials for textile manufactures, \$9,229,342; miscellaneous articles, \$7,473,689; metals, \$3,268,980; animals for food, \$3,095,749; chemicals, dyestuffs, and tobacco.

EXPORTS.

British and Irish produce and manufactures.

Month and seven months.	1894.		1895.	
Month ended July 31.....	£18,398,536	\$89,527,276	£20,559,486	\$100,042,459
Increase.....			2,160,950	10,515,183
Seven months ended July 31.....	125,280,011	609,612,534	126,677,002	616,410,292
Increase			1,396,991	6,297,758

It is noteworthy that during the month every article of export shows an increase in the following order of values: Yarns and textiles, all other articles (manufactured or partly manufactured), articles of food and drink, raw materials, metals and manufactures of metals, apparel and articles of personal use, chemicals and medicines, machinery and millwork, parcel post, and living animals.

The articles showing an increased export for the seven months were: All other articles (manufactured or partly manufactured), \$9,462,365; yarns and textiles, \$5,680,987; machinery and millwork, \$1,587,430; parcel post, \$515,689; animals living, \$475,207. Articles showing a decreased export for the seven months were: Raw materials, \$6,281,354; metals and manufactures therefrom, \$3,035,244; chemicals and medicinal preparations, \$1,088,695; apparel and articles of food and drink.

Exports of foreign and colonial merchandise.

Month and seven months.	1894.		1895.	
Month ended July 31.....	£4,289,764	\$20,863,991	£4,789,951	\$23,307,901
Increase.....			500,187	2,443,910
Seven months ended July 31.....	33,943,663	165,169,864	35,021,305	170,413,670
Increase.....			1,097,642	5,243,806

We thus have for the seven months ended July 31, 1894, and 1895:

Total trade.	1894.		1895.	
Imports.....	£242,806,918	\$1,181,498,463	£238,801,680	\$1,162,008,975
Exports.....	159,223,674	774,782,398	161,698,307	786,823,962
Excess of imports.....	83,583,244	406,716,065	77,103,373	375,184,013

Expositions and Commercial Museums.*—At its meeting on the 8th of July, the Industrial Society of the East, which numbers among its adherents most of the great manufacturers of this region, discussed the expediency of the Universal Exposition. The greater number of members present declared that, in their opinion, the project of a universal exposition at Paris in 1900 does not seem to correspond to any national want of the highest order. However, the society did not pronounce finally upon the question, but decided to institute an inquiry among its adherents, and to ask them their opinion of the proposed exposition from an industrial, commercial, and social point of view.

The Chamber of French Commerce at Charleroi, has sent to the syndicate chamber of manufacturers of painted (or decorated) papers, 10 Lancry street, Paris, a collection of 696 samples of painted papers of German manufacture. These samples will be forwarded later to the chambers of commerce at Lyons and Abbeville, as well as to the consultative chambers of Châlons-sur-Marne, and of Mende. If other commercial institutions (chambers, museums, etc.), should desire to receive any communication from this collection, it will suffice for them to apply to the President of the Chamber of French Commerce, 16 Quay Brabant, at Charleroi (Belgium). The

* Translated from the *Revue du Commerce Extérieur*, July 13, 1895.

only expense will be the transportation of the samples from one city to the other.

In pointing out the importance acquired since the union of the railroad line from Moscow and Kazan with that of Penza, by the city of Saratoff, which, on account of its geographical situation has become the principal commercial center of the region of the Volga, the managers of the Ural Railroad have made known their intention to establish in that city a permanent exposition of samples and patterns of divers products manufactured in all parts of the Empire. The moderate price of the ground, the cheapness of labor and fuel, the abundance of petroleum, and the facilities of communication, constitute a combination of privileged conditions for manufactures. The company besides is willing to concede gratuitously the ground necessary for the construction of a museum, and to give at its stations, depots, etc., an equally gratuitous publicity to notices and advertisements by manufacturers. On the other hand, the Department of Commerce and Manufactures has informed it that the board of administration of the volunteer fleet has the intention of organizing moveable expositions of samples of products exported or imported by the ports which the vessels of its fleet make use of, and invites it to lend its cooperation to an experiment destined to insure the development of commercial relations abroad. The committee hastened to communicate these two pieces of information to the Museum of Manufactures at Warsaw, and also to the societies for the encouragement of commerce and manufactures at Lodz and Warsaw, calling their attention to the advantages they present in regard to their relations with Russia as well as with the transcaspian region and the center of Asia. It has shown that not being the first to occupy a place that may be taken by foreign producers, the manufacturers of Warsaw and Lodz would be liable to meet in the markets of the extreme east a competition that may prove disastrous to their interests.

The Franco-Swiss Tariff War.*—After a running debate, the committee on tariffs of the Chamber of Deputies decided to propose the adoption of the Franco-Swiss arrangement. There were only three votes against it, and M. Meline was unanimously chosen to report it. Without exaggerating the importance of these facts, and the symptoms to be deduced from them, we may be permitted to indicate it. Without doubt, the present arrangement does not resemble the one the Government negotiated, and which it presented to the Chamber in 1892. The number of articles touched upon has since been considerably reduced. Three years ago, it was fifty-five, and now it is but thirty. It must be noted, further, that the committee on tariffs already admitted in 1892 that of these thirty articles, nineteen were the subject of the diminution of tariffs that are proposed to-day. We see, then, what numerous concessions, some serious ones, have been made to the spirit of pro-

* Translated from the *Journal des Débats* of July 6, 1895.

tection. If we had to compare the arrangement of 1892 with that of 1895 we should, perhaps, give the preference to the first. We advised passing it at the time, but we were not listened to. That is a fact which should have been accounted for. The Government ought not to have sought for the best practicable arrangement, but one to which there was a chance of agreement by the Chamber. Was it successful? Yes, without doubt, since M. Meline gave it his support. But such as it is, would the committee on tariffs have accepted the present arrangement in 1892, and would M. Meline have fathered it? We doubt it. Times are changed—men themselves begin to unbend; they relax somewhat the rigor of so-called principles; they show themselves to be more conciliating. Interests of a more general order have impressed them, and they take them into consideration. This is not, of course, without accusing the pusillanimity of former governments that have not dared to maintain against Switzerland a tariff war sufficiently severe to induce it to yield. M. Meline bitterly regrets this excessive moderation, but he admits that our present situation is intolerable. What use in asking if it was our fault or not? We must get out of it.

This situation is summed up in a few words: "While we read in the statement of the motives of the law project, that Swiss merchandise continued to enter our ports at the price of a simple increase of duty of 41 per cent, resulting from the substitution of the general tariff for the minimum tariff, it is by 190 per cent that the differential taxes increased as to imports of French products into the federal territory. The same quantities in short which, according to the conventional Swiss tariff, had in 1892 paid but 7,650,000 francs of duties, were taxed in 1895 at 22,222,000 francs—say, an excess of 14,572,000 francs; when the duties collected on Swiss products entering France were on like quantities raised from only 6,657,000 francs to 9,313,000 francs—say, a difference of increase of 2,749,000 francs. The consequences of such disproportion were not delayed; the figures of our exports to Switzerland fell from 227,000,000 francs in 1892, to 172,000,000 francs in 1894, say a loss of 55,000,000 francs, representing 24 per cent of the total, while the imports from Switzerland into France only declined from 91,900,000 to 74,800,000 francs, being a deviation of 17,100,000 francs, corresponding to 18 per cent only of the former figure." If such is the situation, all that we can say of it is that it has taken a long time to modify it. We bring ourselves to this at last. Is it known to what figure the reduction proposed on Swiss products amounts? To 800,000 francs. Thus, thanks to a reduction of 800,000 francs in our minimum tariff, they free our products of 14,572,000 francs in discriminating duties. Such is the proposition made to the Chamber. Can it hesitate to vote for it? Such is not the opinion of its tariff committee; it is not that of M. Meline, its president, who reported it. The results are too considerable not to be obtained through some concessions. We groan over these concessions which comprehend the lowering of tariffs on Gruyere cheeses, silks, and embroideries, but it must be confessed they are of small importance compared with the advantages

they insure to us. After having groaned, M. Meline is resigned. We do not yet know his report, but he writes in the journal that he edits:

Much as it costs us to accept it, we do not think we have the right to propose the rejection of the law project, and that for several reasons. In a work like that, there is a harmony to be considered before everything else—general results to be weighed without passion and without prejudice. Now, it is not to be denied that the vote for the arrangement proposed will have the immense advantage of putting an end to the situation, which could no longer be protracted without veritable *naïveté* on our part.

In short, we were the first victims of our own want of compromise. We ought to thank M. Meline for having written those lines, which somewhat resemble a confession. Perhaps, he might have raised the question a little higher and have shown the political interest, interest of the first order, which ought to lead us to establish or reestablish with Switzerland commercial relations calculated to draw closer between it and ourselves the ties which for sometime have been so grievously relaxed. They have even been on the eve of being definitely broken. Our negotiators have shown, in the course of parleys which were very long, the most diverse qualities. They encountered on the part of the Swiss Government, which thought it had cause to complain of us sufficiently, an indifferent disposition at the beginning. They had to take into account the presumed resistance that the protectionist spirit would continue to oppose in the Chamber. Between contrary interests and prejudices, a ground of conciliation had to be found. They found it, which does great honor to M. Hanotaux, at Paris, and to M. Camille Barrère, at Berne. Our ambassador must have shown uncommon patience, tenacity, and perspicuity to conquer all the difficulties that rose up before him; but the service to be rendered was of a kind to stir one's energies rather than to discourage them. From beginning to end, the negotiation was conducted with a will to succeed, and it succeeded. The vote of Parliament is no longer doubtful.

We published, in our yesterday's edition, the text of the decision just reached by the Lyons Chamber of Commerce in response to the protest of a certain number of manufacturers against the renewal of commercial relations with Switzerland. Once more, the Lyons chamber undertook to confirm the legitimate hopes founded by it on the first international agreement arrived at since the vote on the general tariff. But the representations of the Lyons manufacturers do not limit their aspirations to the definitive acceptance of the convention with Switzerland; they pray that the Government may persevere in the course that has just opened, and that it may enter into negotiations with the neighboring countries "in view of the conclusion of treaties of commerce based on mutual and reciprocal concessions." The earnestness with which the immense majority of the chamber adopted the project of the Franco-Swiss treaty submitted to it by the Government, permits the hope that the prayers of the Lyons Chamber of Commerce will not

be fruitless. Since 1892, experience has done its work, and the most prepossessed minds begin to be anxious for the results of the policy inaugurated three years ago. The Government yesterday placed upon the table of the Senate the draft of the convention with Switzerland. It may be that this plan may not unite so solid a majority at the Luxemburg as at the Palais-Bourbon, but it will certainly be carried. It is a significant symptom on the part of an assembly, which two years ago would have rejected systematically and without discussion every plan of arrangement with any country whatever.

CONTENTS.

	Page.
I.—STRAITS SETTLEMENTS: TRADE AND INDUSTRIES..... <i>Pratt</i>	129
(Cotton Goods Trade, 132, 134, 136—Sugar Cultivation in the Straits Settlements, 137—Machinery in the Straits Settlements, 140.)	
II.—ITALIAN FRUIT CROP OF 1895	141
(Messina, 141—Palermo, 142—Catania, 142.)	
III.—UNITED STATES EXPORTS TO AUSTRIA-HUNGARY..... <i>Ernst</i>	144
IV.—THE ELECTRIC PLOW IN GERMANY..... <i>Doederlein</i>	161
V.—MARBLES, EARTHENWARE, AND MINERALS IN SPAIN..... <i>Bowen</i>	171
VI.—RAMIE SPINNING MACHINERY..... <i>Meeker</i>	172
VII.—RAMIE YARNS AND CLOTHS..... <i>Taney</i>	181
VIII.—STATE AID TO INDUSTRIAL SCHOOLS IN FRANCE..... <i>Morss</i>	183
IX.—AMERICAN SHIPPING FOR ASIATIC PORTS..... <i>Barrett</i>	184
X.—THE SOUTH WALES TIN-PLATE TRADE..... <i>Howells</i>	185
XI.—THE FAIR OF NIJNI-NOVGOROD IN 1894..... <i>Morris</i>	189
XII.—RUSSIAN SEAL FISHERIES—TAXATION AND PRODUCTION OF TEA. }	196
XIII.—RUSSIA AND THE CHINESE LOAN.....	} <i>Karel</i> 198
XIV.—WOOL MARKET IN RUSSIA.....	
XV.—POTATO TRADE OF SCOTLAND..... <i>Savage</i>	201
XVI.—RECENT COMMERCE OF ITALY..... <i>Jones</i>	202
XVII.—AMERICAN TRADE OPPORTUNITIES IN VENEZUELA..... <i>Plumacher</i>	204
XVIII.—EXAMINATIONS FOR THE CONSULAR SERVICE.....	208
XIX.—COMMERCE AND INDUSTRIES OF JAPAN.....	} <i>Germain</i> 215
XX.—INCREASE OF JAPAN'S IMPORT TRADE.....	
XXI.—HINTS FOR EXPORTERS TO JAPAN..... <i>Stephan</i>	220
XXII.—TRADE OF JAPAN IN 1894..... <i>McIvor</i>	221
XXIII.—TRADE OF CUBA WITH THE UNITED STATES..... <i>Barker</i>	228
XXIV.—FRANCO-SWISS COMMERCIAL RELATIONS..... <i>Germain</i>	230
XXV.—SHIPPING AND RAILWAY CHARGES AT BARRANQUILLA..... <i>Bidlake</i>	234
XXVI.—CHINESE IN NICARAGUA..... <i>O'Hara</i>	236
XXVII.—BUSINESS OF THE SUEZ CANAL..... <i>Merritt</i>	238
XXVIII.—NOTES (A New Method of Making Metal Pipes—Monazite in Brazil—Samoan Trade—Railway and Telegraph in Nicaragua—Cotton Caterpillar in Egypt—Austro-American Steamship Communication—German Coke in Australia—The Phylloxera in Italy—Gold Receipts at the Melbourne Mint—Newfoundland-American Trade—German Iron for	

	Page.
Japan—Adulteration of Dyes and Colors in Germany—Cuban Manganese Ore for the United States—Nova Scotia Iron and Steel—Copyright in Denmark—Bluefields Light-House—Certificates-of-Origin Shipments to Switzerland—Tuxpan Light-House—Manchester Exports to the United States—Misrepresentation of American Canned Goods—Consular Reports Transmitted to Other Departments—Consular Reports Reprinted Abroad).....	241
XXIX.—FOREIGN REPORTS AND PUBLICATIONS (Exhibition of California Products at Berlin—Collection of Commercial Information by the French Government—Expositions and Museums—Berlin Exposition in 1896—Belgian Commercial Agency at Copenhagen—Greater Scope for French Chambers of Commerce—Exposition at Tunis—Hungarian Commercial Museum—British Trade Returns).....	250

REPORTS BY COUNTRIES.

	Page.
ASIA:	
American shipping for ports in.....	184
AUSTRALIA :	
German coke in.....	243
Gold receipts at the Melbourne mint.....	244
AUSTRIA-HUNGARY:	
American steamship communication with.....	243
United States exports to.....	144
BRAZIL :	
Monazite in.....	241
CANADA :	
Newfoundland-American trade.....	244
Nova Scotia iron and steel.....	246
CHINA:	
Misrepresentation of American canned goods.....	248
COLOMBIA :	
Shipping and railway charges at Barranquilla.....	234
CUBA:	
Manganese ore for the United States.....	245
Trade of, with the United States.....	228
DENMARK :	
Copyright in.....	246
EGYPT :	
Business of the Suez Canal.....	238
Cotton caterpillar in.....	242
ENGLAND:	
Exports from Manchester to the United States.....	248
Ramie spinning machinery in.....	172
Ramie yarns and cloths.....	181
FRANCE:	
State aid to industrial schools in.....	183
GERMANY:	
A new method of making metal pipes.....	241
Adulteration of dyes and colors in.....	245
Iron for Japan.....	245
The electric plow in.....	161
ITALY:	
Fruit crop of 1895.....	141
Phylloxera in.....	243
Recent commerce of.....	202
JAPAN :	
Commerce and industries of.....	215
Hints for exporters to.....	220
Increase of import trade of.....	218
Trade of, in 1894.....	221

IV

REPORTS BY COUNTRIES.

MEXICO :	Page.
Tuxpan light-house.....	248
NICARAGUA :	
Bluefields light-house.....	247
Chinese in.....	236
Railway and telegraph in.....	242
RUSSIA :	
Chinese loan.....	198
Seal fisheries.....	196
Taxation and production of tea.....	196
The fair of Nijni-Novgorod.....	189
Wool market in.....	199
SAMOA :	
Trade of.....	241
SCOTLAND :	
Potato trade of.....	201
SPAIN :	
Marbles, earthenware, and minerals in.....	171
STRAITS SETTLEMENTS :	
Cotton-goods trade at Penang.....	136
Cotton-goods trade of.....	132, 134
Machinery in.....	140
Sugar cultivation in.....	137
Trade and industries of.....	129
SWITZERLAND :	
Certificates-of-origin shipments to.....	247
Franco-Swiss commercial relations.....	230
VENEZUELA :	
American trade opportunities in.....	204
WALES :	
Tin-plate trade in South.....	185

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1894, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.2 cents in April, 1894, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—Countries with fixed currencies.

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange." It follows, therefore, that when foreign money orders are required, the post-office authorities, to save the Department from incurring loss in such transactions, add the rate of exchange to these valuations.

Countries.	Standard.	Monetary unit.	Value in terms of United States gold.	Coins.
Argentine Republic*....	Gold and silver...	Peso	\$0.96, 5	Gold—Argentine (\$4.82, 4) and $\frac{1}{2}$ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20, 3	Gold—20 crowns (\$4.05, 2) and 10 crowns.
Belgium.....	Gold and silver...	Franc....	.19, 3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis .....	.54, 6	Gold—5, 10, and 20 milreis; silver— $\frac{1}{2}$, 1, and 2 milreis.
British North America (except Newfoundland)).	.... do.....	Dollar.....	1.00	
Chile‡.....	Gold and silver....	Peso .....	.91, 2	Gold—escudo (\$1.82, 4), doubloon (\$4.56, 1), and condor (\$9.12, 8); silver—peso and divisions.
Cuba.....	....do.....	....do.....	.92, 6	Gold—doubloon (\$5.01, 7); silver—peso.
Denmark.....	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Egypt.....	....do.....	Pound (100 piasters).	4.94, 3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	....do.....	Mark.....	.19, 3	Gold—10 and 20 marks (\$1.93 and \$3.85, 9).
France.....	Gold and silver....	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23, 8	Gold—5, 10, and 20 marks.
Great Britain.....	....do.....	Pound sterling....	4.86, 6 $\frac{1}{2}$	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver....	Drachma.....	.19, 3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti.....	....do.....	Gourde.....	.96, 5	Silver—gourde.
Italy.....	....do.....	Lira.....	.19, 3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Liberia.....	Gold	Dollar.....	1.00	
Netherlands‡	Gold and silver....	Florin.....	.40, 2	Gold—10 florins; silver— $\frac{1}{2}$, 1, and 2 $\frac{1}{2}$ florins.
Newfoundland.....	Gold	Dollar.....	1.01, 4	Gold—\$2 (\$2.02, 7).
Portugal.....	Gold	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Spain.....	Gold and silver....	Peseta.....	.19, 3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway...	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Switzerland.....	Gold and silver....	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey.....	Gold	Piaster .....	.04, 4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver....	Bolivar.....	.19, 3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875 the gold standard prevailed in the Argentine Republic. Its currency does not appear in the statements again until 1883, when the double standard prevailed, and the peso attained a fixed value of 96.5 cents.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ending July 1, 1892. The next quarter (October 1) inaugurated the gold standard (*see* note under table of "fluctuating currencies").

‡ The gold standard prevailed in Chile until January 1, 1890. The value of the peso has been the same under both standards.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

B.—Countries with fluctuating currencies, 1874-'90.

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver.....	Florin.....	\$0.47,6	\$0.45,3	\$0.45,3	\$0.41,3	\$0.40,1	\$0.39,8
Bolivia.....	.....do.....	Dollar until 1880; boliviano thereafter	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America...	.....do.....	Peso.....	.96,5	.91,8	.91,8	.83,6	.....	.....
China.....	Silver.....	Haikwan tael....	1.61	1.61	.....	.....	.....	.....
Colombia.....	.....do.....	Peso.....	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador.....	.....do.....	.....do.....	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†.....	Gold.....	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India.....	Silver.....	Rupee.....	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan.....	{ Gold..... Silver..... }	{ Yen.....	{ .99,7 }	{ .99,7 }	{ .99,7 }	{ .99,7 }	{87,6 }	{86,9 }
Mexico.....	.....do.....	Dollar.....	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands ‡.....	Gold and silver..	Florin.....	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru.....	Silver.....	Sol.....	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia.....	.....do.....	Ruble.....	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli.....	.....do.....	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver.....	Florin.....	\$0.39,3	\$0.37,1	\$0.35,9	\$0.34,5	\$0.33,6	\$0.42
Bolivia.....	.....do.....	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America...	.....do.....	Peso.....	.....	.....	.....	.69,9	.68	.85
Colombia.....	.....do.....	.....do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador.....	.....do.....	.....do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†.....	Gold.....	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.93,3
India.....	Silver.....	Rupee.....	.37,8	.35,7	.34,6	.33,2	.32,3	.40,4
Japan.....	{ Gold..... Silver..... }	{ Yen.....	{85,8 }	{81 }	{ .99,7 .78,4 }	{ .99,7 .75,3 }	{ .99,7 .73,4 }	{ .99,7 .91,7 }
Mexico.....	.....do.....	Dollar.....	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru.....	Silver.....	Sol.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia.....	.....do.....	Ruble.....	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli.....	.....do.....	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (*see* CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at \$4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—Quarterly valuations of fluctuating currencies, 1891-'94.

Countries.	Monetary unit.	1892.				1893.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Austria-Hungary *	{ Gold crown.....				\$0. 20, 3				
	{ Silver florin.....	\$0. 34, 1	\$0. 32, 8	\$0. 32					
Bolivia.....	Silver boliviano.	.69, 1	.66, 5	.64, 9	.61, 6	\$0. 61, 3	\$0. 61	\$0. 60, 4	\$0. 53, 1
Central America...	Silver peso.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
China†.....	{ Shanghai tael..	1.02, 1	.98, 2	.95, 8	.91	.90, 6	.90, 1	.89, 2	.78, 4
	{ Haikwan tael..	1.13, 7	1.09, 3	1.06, 7	1.01, 3	1.01	1.00, 4	.99, 4	.87, 4
Colombia.....	Silver peso.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
Ecuador.....	do.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
India.....	Silver rupee.....	.32, 8	.31, 6	.30, 8	.29, 3	.29, 2	.29	.28, 7	.25, 2
Japan‡.....	Silver yen.....	.74, 5	.71, 6	.69, 9	.66, 4	.66, 1	.65, 8	.65, 1	.57, 3
Mexico.....	Silver dollar.....	.75	.72, 2	.70, 4	.66, 9	.66, 6	.66, 2	.65, 6	.57, 7
Peru.....	Silver sol.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
Russia§.....	Silver ruble.....	.55, 3	.53, 1	.51, 9	.49, 2	.49, 1	.48, 8	.48, 3	.42, 5
Tripoli.....	Silver mahbub..	.62, 3	.60	.58, 5	.55, 5	.55, 3	.55	.54, 5	.47, 9
Venezuela |.....	Silver bolivar....	.13, 8	.13, 3	.13	.12, 3				

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia.....	Silver boliviano	\$0. 51, 6	\$0. 46, 5	\$0. 45, 7	\$0. 46, 4	\$0. 45, 5	\$0. 44, 1	\$0. 48, 6	.48, 6
Central America ...	Silver peso.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
	{ Shanghai tael..	.76, 2	.68, 6	.67, 6	.68, 5	.67, 3	.65, 2	.71, 8	.71, 8
China†.....	{ Haikwan tael..	.84, 9	.76, 5	.75, 3	.76, 3	.74, 9	.75, 6	.80	.80, 0
	{ Tien-Tsin tael.				.72, 7	.71, 4	.69, 2	.76, 1	.76, 2
	{ Chefoo tael.....				.71, 7	.70, 4	.68, 3	.75, 1	.75, 2
Colombia.....	Silver peso.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
Ecuador.....	do.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
India.....	Silver rupee.....	.24, 5	.22, 1	.21, 7	.22	.21, 6	.21, 0	.23, 1	.23, 1
Japan‡.....	Silver yen.....	.55, 6	.50, 1	.49, 3	.50	.49, 1	.47, 6	.52, 4	.52, 4
Mexico.....	Silver dollar.....	.56	.50, 5	.49, 7	.50, 4	.49, 5	.47, 9	.52, 8	.52, 8
Persia.....	Silver kran.....							.08, 9	.09, 0
Peru.....	Silver sol.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
Russia§.....	Silver ruble.....	.41, 3	.37, 2	.36, 6	.37, 1	.36, 4	.35, 3	.38, 9	.38, 9
Tripoli.....	Silver mahbub..	.46, 5	.41, 9	.41, 3	.41, 8	.41, 1	3.9, 8	.43, 8	.43, 8

* Austria-Hungary had the silver standard up to August, 1892 (*see* note to "fluctuating" table B).

† China (silver). The Haikwan tael is the customs tael, and the Shanghai tael that used in trade. Consul-General Denny (CONSULAR REPORTS No. 43, p. 516) says: "The value of the tael varies in the different ports of China, and every port has two taels, one being the Government, or Haikwan, tael, in which all duties have to be paid, and the other the market tael, the former exceeding the latter by some 11 per cent."

‡ Gold is the nominal standard in Japan, but silver is practically the standard. The fixed value of the gold yen is 99.7 cents.

§ The gold ruble is valued at 77.2 cents. Silver is the nominal standard, but paper is the actual currency, and its depreciation is measured by the gold standard.

| The Venezuelan bolivar became fixed in value (19.3 cents) on January 1, 1892.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalent.
Almude.....	Portugal.....	4.422 gallons.
Ardeb.....	Egypt.....	7.6907 bushels.
Are.....	Metric.....	0.02471 acre.
Arobe.....	Paraguay.....	25 pounds.
Arratel or libra.....	Portugal.....	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do.....	Brazil.....	32.38 pounds.
Do.....	Cuba.....	25.3664 pounds.
Do.....	Portugal.....	32.38 pounds.
Do.....	Spain.....	25.36 pounds.
Do.....	Venezuela.....	25.4024 pounds.
Arroba (liquid).....	Cuba, Spain, and Venezuela.....	4.263 gallons.
Arshine.....	Russia	28 inches.
Arshine (square).....	.....do.....	5.44 square feet.
Artel.....	Morocco.....	1.12 pounds.
Baril.....	Argentine Republic and Mexico.....	20.0787 gallons.
Barrel.....	Malta (customs).....	11.4 gallons.
Do.....	Spain (raisins).....	100 pounds.
Berkovet.....	Russia	361.12 pounds.
Bongkal.....	India.....	832 grains.
Bonw	Sumatra.....	7,096.5 square meters.
Bu.....	Japan.....	0.1 inch.
Butt (wine).....	Spain.....	140 gallons.
Caffiso.....	Malta	5.4 gallons.
Candy	India (Bombay).....	529 pounds.
Do.....	India (Madras).....	500 pounds.
Cantar.....	Morocco.....	113 pounds.
Do.....	Syria (Damascus).....	575 pounds.
Do.....	Turkey.....	124.7036 pounds.
Cantaro (Cantar).....	Malta.....	175 pounds.
Carga.....	Mexico and Salvador.....	300 pounds.
Catty	China.....	1.333½ (1⅓) pounds.
Do.....	Japan.....	1.31 pounds.
Do.....	Java, Siam, Malacca.....	1.35 pounds.
Do.....	Sumatra.....	2.12 pounds.
Centaro.....	Central America.....	4.2631 gallons.
Centner	Bremen and Brunswick.....	117.5 pounds.
Do.....	Darmstadt.....	110.24 pounds.
Do	Denmark and Norway.....	110.11 pounds.
Do.....	Nuremberg.....	112.43 pounds.
Do.....	Prussia.....	113.44 pounds.
Do.....	Sweden.....	93.7 pounds.
Do.....	Vienna.....	123.5 pounds.
Do.....	Zollverein.....	110.24 pounds.
Do.....	Double or metric.....	220.46 pounds.
Chih.....	China.....	14 inches.
Coyan.....	Sarawak.....	3,098 pounds.
Do.....	Siam (Koyan).....	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Cuadra.....	Argentine Republic.....	4.2 acres.
Do.....	Paraguay.....	78.9 yards.
Do.....	Paraguay (square).....	8.077 square feet.
Do.....	Uruguay.....	Nearly 2 acres.
Cubic meter.....	Metric.....	35.3 cubic feet.
Cwt. (hundredweight).....	British.....	112 pounds.
Dessiatine.....	Russia.....	2.6997 acres.
Do.....	Spain.....	1.599 bushels.
Drachme.....	Greece.....	Half ounce.
Dun.....	Japan.....	1 inch.
Egyptian weights and measures.....	(See CONSULAR REPORTS No. 144.)	
Fanega (dry).....	Central America.....	1.5745 bushels.
Do.....	Chile.....	2.575 bushels.
Do.....	Cuba.....	1.599 bushels.
Do.....	Mexico.....	1.54728 bushels.
Do.....	Morocco.....	Strike fanega, 70 lbs., full fanega, 118 lbs.
Do.....	Uruguay (double).....	7.776 bushels.
Do.....	Uruguay (single).....	3.888 bushels.
Do.....	Venezuela.....	1.599 bushels.
Fanega (liquid).....	Spain.....	16 gallons.
Feddan.....	Egypt.....	1.03 acres.
Frail (raisins).....	Spain.....	50 pounds.
Frasco.....	Argentine Republic.....	2.5096 quarts.
Do.....	Mexico.....	2.5 quarts.
Fuder.....	Luxemburg.....	264.17 gallons.
Garnice.....	Russian Poland.....	0.88 gallon.
Gram.....	Metric.....	15.432 grains.
Hectare.....	.....do.....	2.471 acres.
Hectoliter:		
Dry.....	.....do.....	2.838 bushels.
Liquid.....	.....do.....	26.417 gallons.
Joch.....	Austria-Hungary.....	1.422 acres.
Ken.....	Japan.....	4 yards.
Kilogram (kilo).....	Metric.....	2.2046 pounds.
Kilometer.....	.....do.....	0.621376 mile.
Klafter.....	Russia.....	216 cubic feet.
Kota.....	Japan.....	5.13 bushels.
Korree.....	Russia.....	3 5 bushels.
Last.....	Belgium and Holland.....	85.134 bushels.
Do.....	England (dry malt).....	82.52 bushels.
Do.....	Germany.....	2 metric tons (4,430 pounds).
Do.....	Prussia.....	112.29 bushels.
Do.....	Russian Poland.....	11 3/8 bushels.
Do.....	Spain (salt).....	4,760 pounds.
League (land).....	Paraguay.....	4,633 acres.
Li.....	China.....	2,115 feet.
Libra (pound).....	Castilian.....	7,100 grains (troy).
Do.....	Argentine Republic.....	1.0127 pounds.
Do.....	Central America.....	1.043 pounds.
Do.....	Chile.....	1.014 pounds.
Do.....	Cuba.....	1.0161 pounds.
Do.....	Mexico.....	1.01465 pounds.
Do.....	Peru.....	1.0143 pounds.
Do.....	Portugal.....	1.011 pounds.
Do.....	Uruguay.....	1.0143 pounds.
Do.....	Venezuela.....	1.0161 pounds.
Liter.....	Metric.....	1.0567 quarts.
Livre (pound).....	Greece.....	1.1 pounds.
Do.....	Guana.....	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Load.....	England (timber).....	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 super- ficial feet.
Manzana	Costa Rica.....	1½ acres.
Marc.....	Bolivia.....	0.507 pound.
Maund.....	India.....	82½ pounds.
Meter.....	Metric	39.37 inches.
Mil.....	Denmark.....	4.68 miles
Do.....	Denmark (geographical).....	4.61 miles.
Morgen.....	Prussia.....	0.63 acre.
Oke.....	Egypt.....	2.7225 pounds.
Do.....	Greece	2.84 pounds.
Do.....	Hungary	3.0817 pounds.
Do.....	Turkey.....	2.85418 pounds.
Do.....	Hungary and Wallachia.....	2.5 pints.
Pic.....	Egypt.....	21¼ inches.
Picul.....	Borneo and Celebes.....	135.64 pounds.
Do.....	China, Japan, and Sumatra.....	133½ pounds.
Do.....	Java	135.1 pounds.
Do.....	Philippine Islands (hemp).....	139.45 pounds.
Do.....	Philippine Islands (sugar).....	140 pounds.
Pie.....	Argentine Republic.....	0.9478 foot.
Do.....	Castilian	0.91407 foot.
Pik.....	Turkey.....	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound).....	Denmark and Sweden.....	1.102 pounds.
Quarter.....	Great Britain.....	8.252 bushels.
Do.....	London (coal).....	36 bushels.
Quintal.....	Argentine Republic.....	101.42 pounds.
Do.....	Brazil.....	130.06 pounds.
Do.....	Castile, Chile, Mexico, and Peru.....	101.61 pounds.
Do.....	Greece	123.2 pounds.
Do.....	Newfoundland (fish).....	112 pounds.
Do.....	Paraguay.....	100 pounds.
Do.....	Syria.....	125 pounds.
Do.....	Metric	220.46 pounds.
Rottle.....	Palestine.....	6 pounds.
Do.....	Syria.....	5¾ pounds.
Sagen.....	Russia	7 feet.
Salm.....	Malta.....	490 pounds.
Se.....	Japan.....	3.6 feet.
Seer.....	India.....	1 pound 13 ounces.
Shaku.....	Japan.....	10 inches.
Sho.....	do.....	1.6 quarts.
Standard (St. Petersburg).....	Lumber measure.....	165 cubic feet.
Stone	British	14 pounds.
Suerte.....	Uruguay.....	2,700 cuadras (<i>see</i> cua- dra).
Tael	Cochin China.....	590.75 grains (troy).
Tan.....	Japan.....	0.25 acre.
To.....	do.....	2 pecks.
Ton.....	Space measure.....	40 cubic feet.
Tonde (cereals).....	Denmark.....	3.94783 bushels.
Tondeland	do.....	1.36 acres.
Tsubo.....	Japan.....	6 feet square.
Tsun.....	China	1.41 inches.
Tunna	Sweden.....	4.5 bushels.
Tunmland.....	do.....	1.22 acres.
Vara.....	Argentine Republic.....	34.1208 inches.
Do.....	Castile.....	0.914117 yard.
Do.....	Central America.....	38.874 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Vara.....	Chile and Peru	33.367 inches.
Do.....	Cuba.....	33.384 inches.
Do	Curaçao	33 375 inches.
Do.....	Mexico.....	33 inches.
Do.....	Paraguay.....	34 inches.
Do.....	Venezuela.....	33.384 inches.
Vedro.....	Russia	2.707 gallons.
Vergees.....	Isle of Jersey.....	71.1 square rods.
Verst.....	Russia.....	0.663 mile.
Vlocka.....	Russian Poland.....	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measure.

Millimeter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measure.

Millimeter ($\frac{1}{1000}$ liter) equals 0.27 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6417 gallons.
Hectoliter (100 liters) equals 26.417 gallons.
Kiloliter (100 liters) equals 264.17 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.

Hectometer (100 meters) equals 328 feet 1 inch.

Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).

Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.

Are (100 square meters) equals 119.6 square yards.

Hectare (10,000 square meters) equals 2.471 acres.

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STRAITS SETTLEMENTS: TRADE AND INDUSTRIES.

GENERAL REPORT.

There was a marked improvement in the general trade of the Straits Settlements during the year 1894. Its entire volume represented in value \$341,451,188 (Mexican) in that year as against \$286,991,424 in the year 1893—an increase of \$54,459,764 as follows: Total imports into the Straits Settlements in 1894, \$182,696,138; in 1893, \$152,455,490; increase, \$30,240,648. Total exports in 1894, \$158,755,050; in 1893, \$134,535,934; increase, \$24,219,116.

During the same period, there was also an appreciable improvement in the trade of the Straits Settlements with the United States, the value having risen from \$9,275,599.72 in 1893 to \$10,375,587.59 in 1894, being an increase of \$1,099,987.87, as follows: Imports from the United States in 1893, \$3,127,661; in 1894, \$1,609,837; increase, \$1,517,824. Exports to the United States in 1894, \$8,765,750.59; in 1893, \$6,147,938.72; increase, \$2,617,811.87.

The imports and exports will be found treated in detail in the accompanying comparative statements which I have had compiled, not only from the official returns, which, owing to the absence here of customs supervision are sometimes misleading, but from the particulars contained in the various invoices produced at this consular office during the two years in question, and from such other information as could be entirely relied upon.

The decrease in American imports in 1894 was due, mainly, to the fact that there were no importations of silver specie in that year against the extensive ones of the year previous.

On the other hand, it is encouraging to note that the imports of our lubricating oils, firearms, gas, and electric lighting materials, machinery, dried and preserved fruits, oilmen's stores, paper, brass ware, and sundry other articles have increased in the past year, and that while the arrivals of

no American cotton goods were quoted here in 1893, there were \$7,773 worth of these imported into the colony in 1894—the beginning, I trust, of an important trade in that line in the near future.

Imports into the Straits Settlements from the United States.

Articles.	1893.	1894.	Increase.	Decrease.
Arms and ammunition :				
Cartridges	\$5,380	\$7,250	\$1,870	
Guns	1,017	4,200	3,183	
Muskets and rifles.....	6,060	19,562	13,502	
Percussion caps.....	200	150		\$50
Pistols and revolvers.....	100	138	38	
Beer.....	700	3		697
Books and maps.....	1,050	318		732
Brass ware.....	470	3,345	2,875	
Cabinet ware.....	2,073	324		1,749
Chemicals	50	300	250	
Carriages and materials.....	1,550	1,110		440
Clocks and watches.....	12,097	2,600		9,497
Cotton goods :				
Plain		7,773	7,773	
Wick and waste.....	115			115
Earthenware.....	100			100
Flour (wheat).....	1,111,136	1,051,168		59,968
Glassware	150			150
Gas and electric lighting materials.....		6,700	6,700	
Hosiery and millinery.....	100			100
Hardware and cutlery.....	4,087	2,915		1,172
Ironware	807	917	108	
Anchors and chains.....	48			48
Machinery.....	4,784	6,700	1,916	
Fruits, dried and preserved.....	6,595	8,200	1,605	
Medicines.....	570	840	270	
Milk (condensed).....	2,111	250		1,861
Musical instruments.....	350			350
Oilmen's stores.....	3,210	6,436	3,226	
Oils (lubricating).....	25,720	124,235	98,515	
Paints	1,200	130		1,090
Paper.....	600	3,346	2,746	
Perfumery	400	1,215	815	
Petroleum	424,090	339,387		84,703
Pitch.....		100	100	
Plated ware.....	250			250
Provisions (fresh and salted).....	5,995	4,470		1,525
Resin.....		100	100	
Silk, piece goods.....	1,084			1,084
Silver specie.....	1,498,000			1,498,000
Soap		50	50	
Stationery		50	50	
Telephone and telephone material.....	50	30		20
Tobacco.....	3,590	2,645		945
Cigars.....		1,000	1,000	
Tinware.....	400			400
Vegetables, preserved.....		650	650	
Woodenware.....	1,370	1,230		140
Total.....	3,127,661	1,609,837	147,342	1,665,166

The greatest increase in the exports from here to the United States in 1894 will be found to have taken place in coffee, gambier, gum copal, black pepper, sago, tapioca, and tin. The greatest decrease was in hides,

mace, nutmegs, white pepper, rubber, and sundries. From the comparative table which I inclose, with the statements already referred to, it will be seen that the tonnage of American vessels that entered and cleared at this port in 1894 was 23,340 tons, against 24,280 tons in 1893.

Exports from Singapore to the United States. •

Articles.	1893.	1894.	Increase.	Decrease.
Coffee.....	\$310,517.84	\$876,592.98	\$566,075.14	.....
Cubebs.....	5,663.19	18,074.26	12,401.07	.....
Cloves.....	6,940.84	513.60	.....	\$6,447.24
Chutney.....	.....	46.72	46.72	.....
Coriander seed.....	.....	752.29	752.29	.....
Coral, etc.....	22.18	.....	.....	22.18
Chairs.....	250.61	.....	.....	250.61
Coins, assorted.....	8,913.08	.....	.....	8,913.08
Copra.....	.....	1,126.61	1,126.61	.....
Cassia.....	.....	405.63	405.63	.....
Gutta.....	55,035.26	60,678.02	5,642.76	.....
Gambier.....	996,553.18	1,726,037.84	729,484.66	.....
Gamboge.....	3,849.61	3,487.45	.....	362.16
Gum copal.....	251,698.35	426,138.40	174,440.05	.....
Gum dammar.....	1,201.90	10,993.15	9,791.25	.....
Gum benjamin.....	.....	3,490.62	3,490.62	.....
Hides, beef.....	15,634.49	1,958.48	.....	13,676.01
Japan ware.....	.....	844.00	844.00	.....
Mace.....	13,384.14	.....	.....	13,384.14
Malacca canes.....	.....	1,221.11	1,221.11	.....
Nutmegs.....	158,806.32	126,988.55	.....	31,817.77
Oil:				
Citronella.....	2,748.33	5,211.81	2,463.48	.....
Cajuput.....	663.17	2,748.27	2,085.10	.....
Patchouli.....	1,228.96	.....	.....	1,228.96
Wood.....	413.97	1,411.43	997.46	.....
Pepper:				
Black.....	753,317.41	1,024,036.20	270,718.79	.....
White.....	63,980.36	42,249.82	.....	21,730.54
Long.....	573.36	1,229.85	656.49	.....
Patchouli leaves.....	2,885.42	.....	.....	2,885.42
Pineapples, preserved.....	4,840.46	8,889.57	4,049.11	.....
Precious stones.....	511.48	1,875.06	1,363.58	.....
Personal effects.....	163.90	.....	.....	163.90
Returned goods.....	821.14	.....	.....	821.14
Rubber.....	128,579.03	120,317.08	.....	8,261.95
Rattans.....	477,823.00	560,170.42	82,347.42	.....
Rice.....	.....	106.12	106.12	.....
Sharks' skins.....	41.38	.....	.....	41.38
Sundry goods.....	7,343.91	.....	.....	7,343.91
Samples Straits' produce.....	167.20	.....	.....	167.20
Specimens natural history.....	162.32	.....	.....	162.32
Sago.....	38,562.97	156,653.39	118,090.42	.....
Shells:				
Green snail.....	5,019.67	1,838.43	.....	3,181.24
M. O. P.....	1,712.72	.....	.....	1,712.72
Spears, Malay.....	69.64	.....	.....	69.64
Tapioca.....	206,751.81	495,711.23	288,959.42	.....
Tea.....	5,532.69	.....	.....	5,532.69
Timber.....	1,560.96	.....	.....	1,560.96
Tin.....	2,610,837.12	3,078,353.78	467,516.66	.....
Tortoise shells.....	.....	3,245.64	3,245.64	.....
Wild animals.....	3,155.35	2,352.78	.....	802.57
Total.....	6,147,938.72	8,765,750.59	2,748,331.60	130,519.73

The following shows the number and tonnage of American vessels entered and cleared at the port of Singapore :

Year.	Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.
1893.....	12	13,187	10	11,093
1894.....	13	13,273	10	10,067

E. SPENCER PRATT,
Consul-General.

SINGAPORE, *May 11, 1895.*

COTTON-GOODS TRADE.

The importance of the cotton-goods trade of Singapore, and the special interest it has for us as cotton growers and cotton manufacturers, entitle it, I consider, to be made the subject of a separate report. I have accordingly had a classified statement compiled, which I attach hereto, and from which it will be seen what the value was of the various cotton fabrics imported into the Straits Settlements during the year 1894, and by what countries these were supplied. The statement referred to values the total of the said imports in 1894 at \$16,873,479 (Mexican), and shows that the great bulk came from Great Britain, a large proportion from France, Germany, Holland, India, and Japan, and only \$7,773 worth from the United States. Notwithstanding this, it is a better showing than in the previous year, when there were no importations of American cottons.

In addition to the above I inclose a report from our consular agency at Penang, and forward you at the same time a variety of samples, collected by my instructions, both there and in Singapore.* From these, our manufacturers will be able to judge of the description of goods required to meet the demands of this market, and as to whether they can not supply the same on as satisfactory terms as they are now being supplied from elsewhere.

What I think we can most successfully compete in are plain cotton shirtings, etc., and of these I believe that trial shipments could be made to advantage, provided always that the price on delivery is sufficiently low.

Imports of cotton goods into the Straits Settlements during 1894.

Countries.	Value.	Countries.	Value.
<i>Plain piece goods.</i>		<i>Plain piece goods—Continued.</i>	
Belgium.....	\$79,955	French Indo-China.....	\$22,715
Calcutta.....	9,959	Germany.....	134,511
France.....	6,878	Holland.....	18,084
French India.....	46,668	Hongkong.....	35,912

* Samples filed in the Bureau of Statistics, Department of State.

Imports of cotton goods into the Straits Settlements during 1894—Continued.

Countries.	Value.	Countries.	Value.
<i>Plain piece goods—Continued.</i>		<i>Sewing thread.</i>	
Japan.....	\$193,459	Bombay.....	\$1,000
Madras and Coromandel Coast.....	109,538	China.....	3,330
United Kingdom.....	7,092,670	Germany.....	1,750
United States.....	7,773	Hongkong.....	3,071
Various countries.....	65,291	Italy.....	2,000
Total.....	7,823,413	United Kingdom.....	424,381
		Various countries.....	3,970
<i>Dyed piece goods.</i>		Total.....	439,502
Austria.....	89,086	<i>Handkerchiefs, colored and plain.</i>	
Belgium.....	25,635	Bombay.....	5,935
France.....	53,525	Hongkong.....	14,058
French India.....	110,357	Japan.....	13,015
China.....	4,500	Madras.....	6,050
Germany.....	20,618	United Kingdom.....	29,891
Holland.....	6,880	Various countries.....	11,886
Hongkong.....	188,759	Total.....	80,835
Italy.....	34,737	<i>Sarongs, slendangs, and kains.</i>	
Japan.....	185,753	Austria.....	115,980
Madras and Coromandel Coast.....	349,974	Belgium.....	47,035
United Kingdom.....	613,575	Bombay.....	14,085
Various countries.....	41,782	Calcutta.....	9,300
Total.....	1,725,181	Celebes.....	9,340
<i>Printed piece goods</i>		China.....	39,616
Austria.....	22,820	France.....	438,401
Bombay and Malabar Coast.....	29,940	French India.....	406,543
France.....	28,635	Germany.....	13,843
Germany.....	6,330	Hongkong.....	14,650
Holland.....	17,910	Holland.....	304,605
Java.....	16,320	Italy.....	24,770
Japan.....	15,898	Japan.....	10,160
Madras.....	41,082	Java.....	369,331
United Kingdom.....	1,998,242	Madras and Coromandel Coast.....	351,642
Various countries.....	24,822	Sumatra.....	6,705
Total.....	2,201,999	United Kingdom.....	114,845
<i>Yarn, gray and bleached.</i>		Various countries.....	22,875
Bombay.....	730,756	Total.....	2,313,726
Calcutta.....	30,235	<i>Blankets.</i>	
Germany.....	6,050	France.....	18,150
United Kingdom.....	427,793	Germany.....	19,693
Various countries.....	2,465	Hongkong.....	1,555
Total.....	1,197,299	Italy.....	1,400
<i>Yarn, dyed.</i>		Japan.....	3,480
Austria.....	45,730	United Kingdom.....	203,385
Belgium.....	6,275	Various countries.....	5,755
France.....	25,300	Total.....	253,418
Germany.....	4,750	Grand total.....	16,873,479
Holland.....	27,380		
Italy.....	10,000		
United Kingdom.....	712,830		
Various countries.....	5,841		
Total.....	838,106		

E. SPENCER PRATT,
Consul-General.

SINGAPORE, May 18, 1895.

SUPPLEMENTARY REPORT.*

I have the honor to supplement my report, transmitted on the 18th instant, by the one herewith inclosed, which I think may prove of additional interest to our merchants and manufacturers. While stating the quantities, according to official returns, of cotton goods imported into the colony of the Straits Settlements in 1894, it also gives a general review of the movement of the trade here in the said fabrics during the above period.

The imports of cotton goods into this colony (Straits Settlements) in 1894 represented a total value of \$16,873,479 (Mexican), of which only \$7,773 worth was American. American products figured in this trade to the extent of 3,098 pieces of plain goods.

The total imports of piece goods into the colony from all places numbered 5,595,310 pieces, compared with 3,765,832 pieces in 1893. Singapore imported 3,678,536 pieces against 2,377,861 pieces in the previous year. Of the quantity imported in 1894, 2,534,935 pieces were classed as plain cottons, 495,138 pieces as dyed cottons, and 648,463 pieces as printed cottons, compared with 1,700,967 pieces of plain cottons, 195,760 pieces of dyed cottons, and 481,134 pieces of printed cottons in 1893.

Penang imported in 1894, 1,916,774 pieces, compared with 1,387,971 pieces in 1893. Of the total number of the 1894 imports, 1,115,388 pieces were classed as plain, 544,238 pieces as dyed, and 257,148 pieces as printed, against 581,876, 666,244, and 139,851 pieces of these respective classes in 1893. Penang imported from Austria 66,112 pieces of dyed cloth in 1894, and only 3,000 pieces in 1893, while her imports from French India of the same class of goods fell from 161,859 pieces in 1894, to 22,280 pieces in 1893.

Exports have, on the whole, kept well up with the increased imports. The number of pieces exported reached 3,057,371, of which Singapore sent out 2,175,078 pieces, comprising 1,398,161 pieces; plain cottons, 428,457 pieces dyed, and 348,460 pieces printed. Penang sent out 881,662 pieces, comprising 255,604 pieces of plain cottons, 589,622 pieces of dyed cottons, and 36,436 pieces of printed cottons. Under the exports of dyed cottons are included supers and other plain cottons, which have been dyed locally.

The largest customer, as a port, was Bangkok, which took 695,088 pieces of the three kinds of cottons from Singapore, an increase of 120,364 pieces, followed by Sumatra, which took, along with Achinese ports, 773,575 pieces, an increase of 33,477 pieces; Dutch Borneo took 307,217 pieces, an increase of 88,511 pieces; the Celebes took 129,686 pieces, an increase of 17,943 pieces; Madras and the Coromandel Coast took 112,555 pieces, an increase of 19,633 pieces; and Saigon took 60,814 pieces, a decrease of 82,906 pieces.

* This report was prepared in answer to an inquiry made by Southern manufacturers as to the best means of introducing their products into the Straits Settlements.

The imports of bleached and gray yarn were nearly doubled, having risen from 6,380 bales in 1893 to 12,080 bales in 1894. Nearly the whole quantity was imported by Singapore. The United Kingdom sent 3,646 bales, an increase of 2,065 bales, and Bombay 7,986 bales, an increase of 3,444 bales. The exports rose in proportion, the number of bales sent out reaching 10,094, an increase of 4,915 bales. To Bangkok, 3,157 bales were exported, compared with 1,613 bales in 1893; to Java, 2,480 bales, compared with 1,315 bales in 1893; to Saigon, 1,910 bales, compared with 287 bales in 1893, and to the Celebes, 647 bales, compared with 371 bales in 1893.

The imports of dyed yarn in 1894 amounted to 10,162 bales, an increase of 5,262 bales, and the exports to 8,534 bales, an increase of 3,757 bales. The United Kingdom sent 8,654 bales, against 3,155 bales in 1893, and there were exported to Bangkok 5,600 bales, an increase of 3,146 bales.

In the value of sewing thread imported, there is an increase of \$62,599 over the 1893 import value. Out of a total import value of \$439,502 from the United Kingdom, no less than \$424,391 were imported.

In 1894, there were imported 69,662 dozen cotton handkerchiefs, and only 14,387 dozen exported. Of these quantities, Singapore imported 36,972 dozen and exported 14,314 dozen. Compared with 1893, the decrease in imports amounted to 35,045 dozen, and in exports to 3,250 dozen. From the United Kingdom, 35,112 dozen were received, compared with 59,161 dozen in 1893.

The quantity of sarongs, slendangs, and kains imported reached 204,211 corges,* an increase of 8,689 corges over the figures of the previous year. From the United Kingdom, 19,857 corges were imported, a decrease of 4,486 corges; from France, chiefly of Swiss manufacture, 41,905 corges were imported, a decrease of 22,269 corges; from Java were received 29,980 corges, a decrease of 2,020 corges; from Holland, 34,389 corges were imported, compared with 27,531 corges in 1893, and from French India and Madras increases are also recorded. The total exports amounted to 87,746 corges, an increase of 9,788 corges, of which total export Bangkok took 27,134 corges; Dutch Borneo, 12,482 corges; Sumatra, 11,180 corges; and Burmah, 7,320 corges, compared with 30,913, 9,218, 6,225, and 7,870 corges respectively, exported to these places in 1893.

Cotton blankets, including covers, show a total import of 565,958 pieces, an increase of 44,029 pieces over last year's imports, and a total export of 384,672 pieces, an increase, compared with 1893, of 13,335 pieces. From the United Kingdom, 515,106 pieces were imported, against 444,429 pieces in 1893. Bangkok took 368,517 pieces, an increase of 13,437 pieces.

The cotton fabrics supplied by the United States to the Straits Settlements in 1894, consisted of 3,098 pieces of plain goods, all of which were entered at the port of Singapore.

Considering that Singapore, by reason of its geographical position, is the great distributing point for all that vast Indo-Malayan and Indo-Chinese

* The consular agent at Penang says the corge is 20 pieces.

region lying between India, which is already an extensive cotton producing and manufacturing country, and Japan, which is rapidly developing into the latter, I can but repeat what I have previously said on the same subject, that if we contemplate entering into competition with the rest of the world in the trade in cotton fabrics of that portion of eastern Asia, still nonmanufacturing, it is here that we must fight the battle. To do this successfully, though, it will be necessary for us to prove that our cottons can be placed on the market at least at as low a price as those from elsewhere, and for that purpose I would suggest, what I have suggested before, that our merchants send trial shipments, especially of our plain goods, since it is in these that I think we can more successfully compete.

I can learn of no house here doing direct business with the United States, but if American manufacturers will send me samples with prices attached, I will see that they are delivered to those firms in the trade who are in the best position to place them on the market.

E. SPENCER PRATT,
Consul-General.

SINGAPORE, *May 25, 1895.*

COTTON-GOODS TRADE AT PENANG.

[Report by Consular Agent Frederick Lederer.—Inclosure in Consul-General Pratt's report.]

I do not think that importers would try to get their supplies from the United States as long as we have no direct steam communication. I am under the impression that the steamship company Navigazione Generale keeps up a regular traffic from Genoa to the southern States. We, from this side, have the North German Lloyd steamers and those of the Navigazione Generale running regularly to Genoa, so that both lines joined together would form a reasonably short way of communication between the United States and the Straits. On account of the high rates of freight on both lines, however, the trade is carried via England, with transshipment at Liverpool, which route is very much longer than the other. Besides, the loss in interest on amounts paid in the United States for goods bought there free on board has to be taken into consideration, and this is a great reason why importers never think of getting their goods from the United States.

I forward a parcel of samples* which represent, more or less, the goods that have the greatest outlet in this market. A most prominent article for import into this colony is sarongs, of which I have one specimen 42-72 inches, called here "sarongs sebidangs," and marked A, which will show the manufacturers the way in which selvedges, borders, and headings are ordinarily required for sarongs, as well as quality and finish for the common class of sarongs sebidangs which, at the present rate of exchange, sell at \$6.40, less 4 per cent. Sarongs labus, 48-78 inches, and sarongs campos, 25-150 inches, will sell from \$8 to \$14, according to style and quality.

*Samples filed in the Bureau of Statistics.

The sarong trade is merely a consignment business, and goods generally are of Swiss or Dutch origin. They are sent out by the manufacturers in free consignment and sold here at the best obtainable market prices. For the guidance of American manufacturers, I beg to mention that the terms on which this consigning business is carried on are as follows: Prices less 4 per cent, which is a peculiar custom of the market; bills due three months after delivery of goods; commission for sellers, $7\frac{1}{2}$ to 10 per cent.

Under cover B are some small cuttings, which will show the manufacturers the style of designs which at present are required for this market. I wish to point out, however, that the taste of buyers varies very frequently, and only the designs marked Atjeh are more or less in constant demand.

As regards printed cotton goods, it is nearly impossible to give an idea of what this market really requires. The samples which I forward under covers I, II, III, and IV represent the qualities most in demand, but with regard to designs it is impossible to state which would suit our market and which would not. New designs are always in demand.

Printed cotton goods are sold here in 31-2 inches breadth at from 8 to 15 cents per yard, less 4 per cent, and in 27-inch breadth at \$32 to \$60, less 4 per cent per corgé of 20 pieces, each measuring 24 yards, according to quality, designs, and print. Designs as per cuttings under cover I are only suitable for 27-inch corgé prints, and bring at the present rate of exchange (2s. 2d.), about \$52. Samples under cover II are for 31-2-inch yard prints only, and sell as per quality of cuttings at 14 cents, less 4 per cent. The other designs under cover III are suitable for yard prints only, and those under cover IV for corgé prints, but it would lead too far to give a description of the peculiarity of each assortment.

The only way the business can be pushed is by sending lots of samples to parties interested, to enable them to compare the American goods with the English, Dutch, and Swiss goods. Any practical trial will help the manufacturer very much more than books of information, and self-earned experience is of much greater value than any other. If the manufacturers of the United States wish to have a share in the Straits market they will have to try to secure the market practically, and if they prove that they are able to compete favorably with their European neighbors I have no doubt that they will secure it. My opinion is that very little can be done from this side to work up a trade, if the first steps are not made by the other party.

SUGAR CULTIVATION.

While at Penang, or Georgetown, on the island of Penang, officially styled Prince of Wales Island, I took occasion to visit a sugar estate a few miles distant, in the Province of Wellesley, on the mainland of the Maylay Peninsula. To this estate, which bears the name of Batu Kawan, and is considered here a model sugar plantation, I was invited by the managing proprietor, Hon. J. M. Vermont, a member of the Legislative Council and one of the most

prominent public men and successful planters of the colony. Mr. Vermont took me over to his place in one of his steam launches which he has constantly plying between it and Penang. A two hours' sail across a beautiful stretch of tropical sea and up a winding mangrove-fringed lagoon brought us to the plantation wharf. Here a general view could be obtained of the whole estate—a broad expanse of alluvial plain, canalized and leveed for protection against high tide, and extending for miles inland until it reached the virgin forest. It is almost the counterpart of the sugar region of southern Louisiana, where I might easily have fancied myself again had the tall bamboos and flamboyants and cocoa palms that rose here and there in giant clusters above the waving cane fields not reminded me that I was in the heart of the torrid zone.

It took but a little while to drive from the landing to Mr. Vermont's residence—a typical planter's home, with commodious rooms and wide verandas, situated close to the sugar mill and within easy reach of the managers', engineers, and sugar-makers' houses, the hospitals, and the quarters. My first visit was to the mill, which I found equipped with such modern appliances as double sets of rollers, steam evaporators, vacuum pans, triple effect apparatus, centrifugals, etc., the fuel used being the crushed cane or "bagasse." The entire mill is lighted with electricity, as is also the residence, and work proceeds in the former at night the same as during the day. Hauling, which figures as one of the most important items of expense in the taking off of our Louisiana crops, is here dispensed with, since the canals which intersect the estate in every direction admit of the canes being floated in barges from the fields where they are cut to the very sides of the mill's carrier.

In order to obtain the fullest information possible on the subject of sugar planting, as now carried on in the Straits Settlements, I addressed Mr. Vermont a series of questions which, with his answers, I submit with this report.

Though compelled to leave Batu Kawan the day after my arrival, I was able, in this short time, to see something of the cultivation of the cane and its manufacture into sugar, and inspect the quarters and hospitals for the hands, which were scrupulously clean and well managed. Altogether, my impressions of the place were most satisfactory, and I shall always gratefully recall the generous hospitality of its proprietor.

E. SPENCER PRATT,

SINGAPORE, *May 30, 1895.*

Consul-General.

MR. VERMONT'S REPLIES TO MR. PRATT'S INTERROGATORIES.*

It is not known at what period or from whence the sugar cane was introduced among the Malays of Keddah; it has, however, been cultivated by them from time beyond the reach of tradition. Cultivation of sugar as a product of export was first commenced by some Chinese from Swatow; who, allured by the richness of the soil, the facility of water communication,

* The dollar of this report is the Mexican dollar, valued in 1894 by the United States Treasury at 55.56 cents; the ton referred to is the English ton of 2,240 pounds.

and cheapness of firewood, settled in the central and southern portion of the Province of Wellesley.

The cultivation of the cane in the native states is only of recent date.

The sugar manufactured by these Chinese was a coarse black sugar, known as basket sugar. This was occasionally made into clay sugar, which commanded double the price of the dark; this sugar was sold locally. Europeans, seeing the value of the product and trusting that science and their skill would give better results, entered into the cultivation by starting two small factories in Penang, one in the Water Fall Valley, and the other in the Ayer Etam district. Both these mills were driven by water. Up to the forties, sugar exported from this colony went to the English market in the foreign scale of duty; soon after this, the duties were altered, which gave a great impetus in developing estates, the result being that about a dozen large properties were opened with very little knowledge of the capital required or the quality of soil needed, the result being that eventually many of these estates started in the Province of Wellesley and Singapore had to be abandoned, and a great deal of money was lost.

It is difficult to say what is the amount of money invested in sugar, but when it is stated as a fact that it takes upwards of \$500,000 to establish an estate of 1,000 acres, and that there are about 7,000 acres in cane cultivation at present in the Province of Wellesley, and 14,000 acres in Perak, an idea of the capital may be arrived at.

Acreage and yield.—The acreage planted last year was as follows: Province of Wellesley, say 7,000 acres; Perak, say 14,000 acres, producing, say, 50,000 tons which may show a shrinkage this year of 12 per cent, owing to the severe drought of last year. The average yield of sugar per acre varies very much, $2\frac{1}{2}$ tons per acre being a very good return.

Sugar lands are generally held under the following conditions: In the Province of Wellesley, the bulk of the sugar lands are freehold; some pay an annual quit rent of from 25 cents to 45 cents per acre; the Government is liberal to bona fide planters. The average cost of clearing forest land is about \$5 per acre; digging roots, draining, hoeing, etc., \$15 per acre. Planting and cultivating an acre up to the time of manufacturing amounts to the following: Cost of plants, \$4; planting, \$2; cultivation and banking, cutting, weeding, etc., \$22.

Kinds of cane cultivated.—When sugar cultivation was first started, the much-vaunted Selangor cane was exclusively planted, but as the soil became exhausted Europeans looked to Mauritius and Java for their plants, hence the yellow Mauritius and striped Bourbon are now exclusively planted.

Cane diseases, etc.—In all countries, the canes are liable to be attacked by a variety of diseases and insects, but on the whole we are pretty free of this, owing to careful culture and liberal manuring.

Mode of cultivation.—The mode adopted for cultivating cane may be called garden culture, in a great measure, as the canes are banked up for the first six months, which prevents falling and allows thorough ventilation between the rows. They mature in about twelve months.

Height and yield of cane.—The average height of cane here is from 7 to 12 feet; I have, however, seen them 16 feet. Their weight, therefore, varies. I should say the yield of sugar and molasses from an average field would be about 4 tons.

Cost of cultivation.—It costs to plant and cultivate an acre of cane \$48 for the first crop, and the same for the second crop; you should then apply \$20 for manure, although you save that amount in clearing. To manufacture sugar, inclusive of fuel, costs \$25 per ton.

Labor.—The natives of the country dislike manual labor, therefore cultivators are entirely dependent on imported labor. First of all are the Chinese. These men arrive in large numbers, and are engaged to work 330 days, at a wage of from \$26 to \$30 with food and clothing. They have two days in a month on which they can take a holiday, besides their festival days. If sick, they are allowed thirty days during the period of contract to remain in a hospital free of all charges, and all extra days over thirty to be made up; if from their own indiscretion or fault, all the time in the hospital is to be made up. On engaging,

an advance of \$38 is made by the employer to the recruiter in payment of passage money, commission, and other charges incurred at the port of embarkation, and \$19.50 of this is reimbursed by the laborer to the employer, so that the employer incurs a certain loss of \$18.50 on each man. If the laborer elects to work at task work, which he invariably does, he is charged 8 cents a day for his food, but he can earn from \$6 to \$7 a month and finish his contract in about eight months, as the extra work he does per day is calculated in his favor.

Tamils, or as they are generally called "Klings," are from the Coromandel Coast, where they are recruited to a certain extent under Government inspection. Large numbers arrive, paying their own passage, etc., but employers have to assist others by advancing money to the extent of \$18 for each man to pay for their passage, recruiting fees, and other charges. This is now irrecoverable, for contracts are made for three years' wages at 13 cents per working day for the first year, 14 cents per day for the second year, and 15 cents per day for the third year, with food. The working hours are nine a day; if over nine hours, 2 cents is given if work is done six full days in the week. Although no work is done on Sunday, a full day's pay is given. If they have not worked six days, this privilege lapses. Thirty days in each year is allowed free in a hospital, where food, medicine, and attendance are given gratis; but if in the hospital through their own indiscretion, the number of days absent has to be made up at the end of the contract. Females are under the same contract and terms, only that their wages are calculated at 10 cents per day.

As a rule, the Chinese are the better laborers for field work, and the Tamil for factory work. All laborers are housed at the expense of the employer. Water is supplied in pipes, and fuel can be got in the jungle simply for collecting it. Rice is supplied at wholesale market rates.

Production and export.—Chinese, with their small mills, manufacture what is known as Nos. 1 and 2 basket sugar. Last year, this realized \$4 to \$4.50 per picul (133½ pounds). This is largely exported to Europe for the refineries as well as to China.

Europeans make vacuum pan sugar, of different qualities, but usually a gray sugar, washed or steamed when passing through the centrifugals. This, last year, realized from \$5.80 to \$6.30 per picul. A Muscovado quality is made for the refineries in Hongkong, and last year it realized from \$6 to \$6.15 per picul; this year, \$5.95 to \$6.15 per picul. From the molasses, a second quality is manufactured, which realizes from \$3.50 to \$4.30 per picul. Rum is sold for \$42 to \$47 a puncheon, and molasses for \$1 per 7½ gallons.

Machinery.—All European estates have double crushing, with maceration between the two sets of rollers; triple effects, settlers, scum presses, vacuum pan, and Weston's centrifugals. In fact, in these days of competition everything that comes out as an improvement must be adopted. It is the only way to keep an estate from going to the wall.

MACHINERY IN THE STRAITS SETTLEMENTS.

In replying to a New York State manufacturer of machinery, Consul-General Pratt, under date of June 15, says:

It must be remembered that for our machinery to successfully compete with that of other countries in these markets the price, delivered, would have to be as low and the quality, if anything, superior. The local production of rice is so limited that I do not think there will be any particular demand here for rice milling machinery for some time to come. It is different, however, with sugar, of which a considerable amount is being produced in certain parts of the colony and its dependencies, and with coffee, of the Liberian variety, the success of which is causing a rapid increase in its already extensive cultivation throughout the Malay Peninsula. The following are the principal importers of machinery at Singapore, which is a free port: Riley, Hargreaves & Co.; Howarth, Erskine (limited); J. M. Lyon & Co.; Lawson, Lyon & Co.

ITALIAN FRUIT CROP OF 1895.

MESSINA.

I have questioned the leading shippers of green fruit, and also many of the farmers of the district, and the consensus of opinion is that the crop of both lemons and oranges for the coming season will be slightly less in quantity, but very probably superior in quality to that of last season, provided, of course, that the requisite amount of rain falls. Upon this everything depends. Should this occur towards the latter part of this month, it is expected that the first shipments of lemons will be made about the 5th of October—about two weeks earlier than usual—the new crop being remarkably far advanced in development. The anticipated shortage in the crop is on account of the frosts of last year, which seriously affected both the lemon and orange trees in the mountain districts.

The final crop of the present season, the “bastardi,” which will be gathered about the 20th of this month, will be fully as abundant and equal in quality to that of last year.

Reports from Calabria state that the bergamot crop promises to be short and of an inferior quality, the fruit being small and scarred. This means an advance in the price of that essence, which, for the last two seasons, has been remarkably low.

The mandarin, bitter orange, and citron (cedro) crops are well advanced, and will probably slightly exceed those of last year.

I inclose herewith as a matter of interest, tables showing the total exports from Messina, Palermo, and Catania (practically the only ports from which green fruit is shipped) to the United States and Canada, and the total exports to those countries from the Messina district alone. These tables are compiled from chambers of commerce statistics, and are reliable. From them it will be seen that Canada imports direct only during the month of April, navigation on the St. Lawrence being closed up to that time. For the other months, she is compelled to rely upon the markets of New York and Boston for her supply.

Exports to the United States and Canada from Messina, Catania, and Palermo in 1894-95.

Month.	Oranges	Lemons.
	<i>Boxes.</i>	<i>Boxes.</i>
October.....		47,766
November.....	10,580	192,975
December.....	57,871	195,658
January.....	181,289	182,408
February.....	237,872	166,214
March.....	181,792	215,688
April.....	77,875	288,715
April (Canada).....	31,263	64,749
May.....	45,516	272,326
June.....	7,749	242,772
July.....	1,031	106,449
Total (exclusive of Canada).....	801,575	1,910,971

Exports to the United States and Canada from Messina in 1894-95.

Month.	Oranges.	Lemons.
	<i>Boxes.</i>	<i>Boxes.</i>
October.....		43,427
November.....	6,000	136,971
December.....	16,850	124,331
January.....	91,140	91,971
February.....	136,975	68,255
March.....	114,949	65,003
April.....	49,094	66,596
April (Canada).....	22,610	52,038
May.....	12,248	45,368
June.....	125	32,622
July.....		8,467
Total (exclusive of Canada).....	427,381	683,011

CHAS. M. CAUGHY,
Consul.

MESSINA, *August 10, 1895.*

PALERMO.

The present condition of both oranges and lemons in this consular district is good. As yet, both are small, but not uncommonly so for the time of year. Unless this district experiences exceedingly severe weather—weather quite unknown to it—there is no doubt that there will be an abundance of both oranges and lemons to meet, as heretofore, the demands made on this market by foreign markets.

WILLIAM H. SEYMOUR,
Consul.

PALERMO, *August 9, 1895.*

CATANIA.

At present, there is nothing (nor will there be before the middle of September), in the market or upon the trees, ripe and fit for shipment, except the remainder of the “Verdelli” lemons, a forced or late extra crop, which ripens and is picked day by day from June, throughout July, and as late as the last of August.

This fruit is greenish (hence its name), not large, unless left longer upon the trees, but hard and sound (except covered with white and black spots, caused by black and white lice, which, however, injure only the appearance of the fruit and are removed before packing), is a good keeper and bears shipping well. At present, the supply being nearly exhausted, it is in good demand and brings good prices here. Offers of 50 lire (\$9.18) per thou-

sand upon the trees, have been refused. The expense for picking over and removing the louse spots adds materially to the cost of the fruit. The cleaning is done by women and girls by means of small, sharp-pointed sticks and brushes, then the fruit is wrapped in tissue paper and boxed.

Since July 10, no lemons have been shipped to the United States, for the reason that all last year, with the exception of last shipment heard from, the prices received were so low as to cause heavy losses to the shippers (one man is said to have lost over 100,000 francs), yet they kept on shipping (especially when other markets became somewhat blocked), hoping for the next cargo to realize enough to cover losses on previous shipments—the more so when the telegrams stated “very hot weather.”

I do not think that the Catania merchants will continue to ship as many lemons and oranges to the United States as in the past, unless conditions should materially change. They are thoroughly disgusted with the American trade. The Trieste market is more satisfactory, not only on account of better prices realized, but also for the reason that the fruit sent there does not have to be so carefully selected, as a long shipment to the United States necessitates; hence the cost of the fruit sent to Trieste is less to the shipper.

Up to this year Palermo, and especially Messina merchants, have always bought up about one-half of the entire lemon and orange crop of this district for export, and of the remaining half, Catania has not been shipping more than one-seventh or one-sixth to the United States, while Palermo is said to send fully four-fifths to United States ports, most of the Palermo firms having relatives or other representatives in America to whom they consign.

The prospective condition is very difficult to give an accurate estimate of, as the statements made in regard thereto are very contradictory, some saying that at this time of the season one can not tell. If the hot, dry weather continues, with occasional siroccos (very hot, moist winds), the fruit crop will be cut short, while, on the contrary, good showers of rain by the end of August or beginning of September, with cooler weather following, will greatly increase the crop. Others state that the crop of lemons and oranges, now formed, is assured, and the weather will only have something to do with the quality, excepting, of course, the later crop, the flowers of which form toward the end of September.

From the best posted and most reliable sources, I learn that the now assured lemon crop, which commences to ripen, and is picked day by day from the middle of September until May, will be good, and about the same as last season—that is to say, approximately about 1,000,000 boxes. As before stated, Catania will only ship direct to the United States a small proportion of this.

The orange crop, which commences to ripen and is picked day by day from November to the end of April or first part of May, has been cut short considerably, and will not exceed 600,000 boxes. This failure is attributed to the bad weather during last winter; the trees, while in blossom, suffered

from snow, sleet, and hail (a rare occurrence here), as also from frequent siroccos.

The orange trees suffered, while the lemons were not damaged, because the former groves are mostly situated in higher altitudes, while the latter are generally lower down on the mountain sides, in the valleys, and along the sea coast.

LOUIS H. BRÜHL,
Consul.

CATANIA, *August 13, 1895.*

UNITED STATES EXPORTS TO AUSTRIA-HUNGARY.

In making the following report on the export trade from the United States to the Austro-Hungarian Empire, which may be of some interest to American manufacturers and exporters, it has been my principal aim not to give to our countrymen opinions and views as I entertained them, but the necessary figures and facts which would allow them to draw their own conclusions. Having these premises, the exporter is, without doubt, the person best capable of knowing whether it will be possible to increase our export trade or not; and if it be possible, American pluck and energy are sure to do it.

The Austro-Hungarian Empire, extending over so large a part of the European continent, and being inhabited by so many millions of experienced people, commercially and industrially, it is but to be expected that exported goods from the United States, though they are situated at a great distance, and are thus obliged to compete under great difficulties with very important commercial factors, should have secured a firm footing in this Empire. To strengthen this position—to increase the export trade of the United States—it is above all things necessary that the American manufacturer and seller obtain a correct opinion of the general state of affairs. To this end, it will be requisite that he inform himself as to the demand for various goods, their value and the prices paid for them, and the transportation charges. To answer these questions, I have made a careful examination of the official publications of the Austrian Government, and in the appended table endeavor to give useful data to American exporters. The first column contains a list of all articles imported during the last two years from the United States into Austria-Hungary. As will be readily understood, it was possible to mention only the various classes, which corresponds to the classification laid down in the Austrian tariff law. The next column contains the commercial unit according to which the duty is levied. It is either a metrical hundredweight net or gross, abbreviated "Mhn" or "Mhg," and equal to 220.46 American pounds, or a single piece. The third column contains the value of each unit, as estimated by the Austrian Government appraisers. In all cases, I have given the average value for the year 1894, though I have been able, in

a few instances, to obtain figures for the first months of this year. The fourth column gives the sum of units exported from the United States to Austria during the year 1893, while the fifth shows the large increase in our export trade to this Empire, rising from 827,056.16 units in 1893 to 1,165,425.78 units in 1894. The demand for foreign goods is marked by the sixth column, for it presents the sum of units imported by Austria, the units from the United States being included in these numbers. The seventh column gives the approximately correct value of America's exported goods, amounting to \$12,294,014.13 during the past year. Finally, the last column supplies the duty levied upon one unit. I wish to add that I have given two rates of duty in a number of cases. It should be mentioned that the United States enjoys, under all circumstances, the privilege of the most-favored-nation clause. I have, therefore, not deemed it necessary to make note, in every instance, of the fact that the given duty is the favored or lower one. But if the importation from countries not thus favored was sufficiently large to be of interest, I have noted the number of their units.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
1. Groceries.							
Cacao beans and shells.....	Mhn ...	\$44. 83	.....	31	3,719	\$1,389. 73	\$9. 74
By way of sea.....	...do....	42. 62	.....	123	4,987	5,242. 26	8. 12
Coffee.....	...do....	48. 52	372	231	59,681	11,207. 43	16. 24
By way of sea.....	...do....	41. 41	1,389	228	313,589	9,441. 94	15. 02
Tea .....	...do....	136. 82	.....	1	1,375	136. 82	40. 60
By way of sea.....	...do....	142. 10	.....	.....	.....	.....	.....
2. Spices.							
Pepper .....	...do....	14. 62	.....	1	58	14. 62	9. 74
By way of sea.....	...do....	13. 95	.....	.....	18,142	.....	.....
Allspice.....	...do....	12. 99	.....	.....	14	.....	9. 74
By way of sea.....	...do....	12. 54	.....	29	4,436	363. 66	9. 74
Ginger.....	...do....	30. 45	.....	.....	47	.....	9. 74
By way of sea.....	...do....	30. 56	.....	3	1,781	91. 68	9. 74
Cinnamon.....	...do....	18. 27	.....	. 5	27	9. 14	16. 24
By way of sea.....	...do....	16. 88	.....	.....	6,228	.....	16. 24
Badian .....	...do....	38. 16	.....	1	9	38. 16	24. 36
By way of sea.....	...do....	37. 35	.....	.....	167	.....	24. 36
3. Tropical fruits.							
Figs:							
Fresh.....	Mhg ...	2. 44	.....	.....	7	.....	1. 22
Under special tariff rates*	...do....	2. 25	.....	.....	83	.....	. 41
Grapes, dried.....	Mhn ...	7. 51	.....	4	93,327	30. 04	4. 87
Carob beans.....	Mhg ...	2. 84	.....	.....	86	.....	1. 22
Under special tariff rates ..	...do....	2. 45	.....	10	21,071	24. 52	. 81
4. Sugar.							
Sirup:							
Fit for eating purposes.....	Mhn ...	9. 70	423	605	2,795	5,845. 80	2. 44
Not fit for eating purposes..	...do....	7. 41	.....	156	1,404	1,159. 96	2. 44
Sugar, raw, under No. 19, Dutch standard.	...do....	8. 12	1	.....	.....	.....	6. 09

* By commercial arrangement, these special rates were granted to the United States May, 1892.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
5. Tobacco.							
Tobacco for Government monopoly.	Mhg....	\$50.34	24,949	17,471	114,773	\$879,490.14	.....
Cigars :							
For Government monopoly.	do.....	812.00	.....	195	3,899	158,340.00	.....
For private persons *.....	Mhn ...	950.00	10	.5	47	475.02	\$21.32
6. Grain, legumes, and flour.							
Corn.....	Mhg ...	1.79	2,506	7,103	2,010,146	12,714.37	.20
Millet.....	do.....	1.77	.....	5	475,772	8.85	.20
Barley.....	do.....	1.85	.....	1	872,803	1.85	.30
Wheat.....	do.....	2.11	.....	1,827	327,399	3,854.97	.61
Beans.....	do.....	2.62	.....	4	3,134	10.52	.41
Pease.....	do.....	2.82	.....	2	49,756	5.64	.41
Flour.....	Mhn ...	5.18	.....	9	3,673	46.62	1.52
Meal.....	do.....	3.78	.....	1	3,531	3.78	1.52
Rice, not shelled.....	Mhg ...	4.87	.....	5	66	24.35	.81
Under special tariff rates...	do	4.06	.....	.....	290	.....	.61
7. Vegetables, fruit, plants, and parts thereof.							
Nuts and hazelnuts.....	Mhn ...	6.09	.....	.....	.....	.....	.....
Under special tariff rates...	do.. ...	6.19	.....	58	30,970	359.00	.61
Prunes, dried.....	do.....	8.67	.....	1	611	8.67	2.03
Fruit (various) dried.....	do.....	7.71	17	9	447	69.39	2.03
Clover seed, special tariff rates..	Mhg ...	22.37	1,101	2,268	24,189	50,735.16	Free.
Various seeds not specially enumerated under special tariff rates.	do	19.43	163	579	96,397	11,249.97	Free.
Live plants, various.....	do.....	8.12	.....	.....	65	.....	.61
Under special tariff rates...	do.....	8.12	17	18	17,469	146.16	.20
Teasel.....	do	32.48	.....	27	2,866	876.96	Free.
Sea grass.....	do.....	1.62	.....	45	8,956	12.90	Free.
Material, various, for brooms, brushes, and upholstering purposes.	do.....	4.66	32	545	54,303	2,539.70	Free.
Bast and reeds.....	do.....	4.47	5	.....	3,271	.....	Free.
Straw.....	do.....	2.23	134	230	36,872	512.90	Free.
Plants and parts thereof, for medical purposes, dried or prepared.	.....	.....	.....	.....	16	.....	1.03
Under special tariff rates...	Mhg ...	20.30	.....	30	4,173	609.00	Free.
Hops and meal thereof.....	Mhn ...	72.67	.....	.....	725	.....	4.06
Under special tariff rates...	Mhg ...	45.47	7	10	12,126	454.72	2.84
8. Animals, cattle.							
Sheep.....	Each...	1.24	.....	14	9,806	17.36	.20
Goats.....	do.....	1.62	.....	2	4,484	3.24	.20
Hogs.....	do.....	6.50	.....	.....	11,000	.....	1.22
Under special tariff rates...	do.....	7.00	2	582	268,273	4,074.00	.61
Mares, for breeding purposes...	do.....	142.10	.....	6	1,615	852.60	4.06
Under special tariff rates...	do.....	825.00	.....	.....	164	.....	4.66
9. Animals, other.							
Oysters.....	Mhn ...	85.26	13	15	283	1,108.38	10.15
Shellfish, other.....	do.....	68.00	2	3	124	204.00	10.15

* Special license necessary.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
10. Animal products.							
Honey.....	Mhn ...	\$12. 18		66	1,996	\$803. 88	\$2. 44
Sponges, bath and horse:							
Not prepared for use.....	...do.....	203. 00	66	48	215	9,744. 00	6. 19
Not fit for use.....	Mhg ...	111. 65	23	36	986	4,019. 40	Free.
Hides:							
Calf, raw, dry.....	...do.....	53. 19		4	7,694	512. 76	Free.
Cattle—							
Raw, green, salted.....	...do.....	14. 92		1,253	106,751	18,694. 76	Free.
Raw, dry, limed.....	...do.....	26. 39	1,682	1,783	99,977	47,053. 37	Free.
Horse, raw, salted.....	...do.....	14. 31		8	4,475	114. 48	Free.
Goat.....	...do.....	35. 52		1	5,733	35. 52	Free.
Kid.....	...do.....	68. 00		1	3,488	63. 00	Free.
Various, not specially enumerated.	...do.....	38. 57		183	8,631	7,052. 31	Free.
Hair:							
Animal.....	...do.....	51. 03	2	12	5,049	612. 36	Free.
Human.....	...do.....	2,030. 00		6	106	12,180. 00	Free.
Bedfeathers.....	...do.....	34. 94		741	8,012	25,890. 54	Free.
Feathers, ornamental.....	...do.....	243. 60		1	161	243. 60	Free.
Bladders, guts, etc.....	...do.....	51. 18	375	868	13,076	44,424. 24	Free.
11. Fats.							
Butter, artificial.....	Mhn....	25. 17	1		11		4. 06
Lard of hogs and geese.....	...do.....	25. 17		2	104	50. 34	6. 50
Paraffin:							
Not purified.....	...do.....	11. 37	2	40	155	454. 80	2. 44
Under special tariff rates.	...do.....	11. 37	30,356	17,795	21,641	202,329. 15	2. 03
Purified.....	...do.....	14. 62			70		2. 44
Under special tariff rates.	...do.....	14. 62	13,864	10,118	23,913	147,925. 16	2. 03
Spermaceti.....	...do.....	73. 08	119	100	194	7,308. 00	1. 62
Fats, animal.....	Mhg ...	12. 18	5,380	3,285	23,229	40,011. 30	. 41
Cocoanut oil, palm-kernel oil...	...do.....	11. 37		84	116,857	955. 08	. 41
Palm oil, solid.....	...do.....	10. 62		176	57,174	1,869. 12	. 41
Tallow, vegetable.....	...do.....	13. 40	534	190	11,045	2,546. 00	. 41
Elaine.....	...do.....	9. 34	49	13	5,364	121. 42	. 81
Bone tallow.....	...do.....	9. 74	1,922	557	19,821	5,425. 18	. 41
Tallow, not specially enumerated.	...do.....	9. 74	1,495	1,595	17,468	15,535. 30	. 41
12. Fatty oils.							
Cotton-seed oil, in casks, bladders, etc.	...do.....	12. 59					3. 25
Under special tariff rates...	...do.....	13. 00	21,273	33,478	57,509	435,214. 00	1. 62
Linseed oil, in casks, bladders, etc.	...do.....						
Under special tariff rates...	...do.....	11. 77		6	121,847	70. 62	. 97
Castor oil, in casks, etc., under special tariff rates, denaturalized.	...do.....	11. 37		11	10,733	125. 07	. 97
Fatty oils, various, not specially enumerated.	...do.....	16. 24	121	272	1,333	4,417. 28	. 97
13. Beverages.							
Beer in barrels.....	...do.....	5. 90		2	63,842	11. 80	1. 22
Liquors, essences, etc.....	...do.....	76. 29		1	732	76. 29	30. 85
Arrach (rum).....	...do.....	36. 24	133	191	6,013	6,921. 84	30. 85

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
13. Beverages—Continued.							
Brandy (cognac).....	Mhg ...	\$60.43	39	41	5,992	\$2,477.63	\$30.85
Distilled beverages, various.....	...do.....	24.36	9	13	503	316.68	24.36
Wine in barrels.....	...do.....	17.60		50	16,375	880.00	8.12
14. Provisions.							
Meat, prepared.....	Mhn ...	26.26	10	171	1,462	4,486.46	2.44
Sausage.....	...do.....	41.21			3.50		10.15
Under special tariff rates..	...do.....	42.63		2	1,753	85.26	6.50
Herrings, salted and smoked...	Mhg ...	5.83		2	129,886	11.66	1.22
Fish, prepared, in barrels.....	Mhn ...	28.20		2	1,932	56.40	6.09
Caviar and surrogates.....	...do.....	155.26	252.5	284	800	52,613.84	20.30
Cacao, ground.....	...do.....	115.71			3		24.36
Under special tariff rates..	...do.....	118.60		2	812	237.20	18.27
Fish, conserved.....	...do.....	34.51	1		5		16.24
Under special tariff rates..	...do.....	36.08	111	89	1,226	3,211.12	16.24
Meat, conserved.....	...do.....	28.42					14.21
Under special tariff rates..	...do.....	28.42	11	14.4	61	412.09	14.21
Meat extract :							
Solid and case hermetic-ally sealed.	...do.....	162.40		1	19.5		16.24
Under special tariff rates.	...do.....	162.40		1	352	162.40	12.18
Liquid and case hermetically closed, special rates.	...do.....	162.40		1.5	26	247.60	6.09
Provisions, various, in cases hermetically closed.	...do.....	71.05		.5	9	35.53	16.24
Under special tariff rates..	...do.....	71.05	32	35	740	2,486.75	14.21
Cakes and candy.....	...do.....	41.41			12		16.24
Under special tariff rates..	...do.....	41.41	7	4	9.60	165.64	14.21
Milk, condensed.....	...do.....	36.54		1	86	36.54	8.12
Provisions, not specially enumerated.	...do.....	30.45	.5	1	522	30.45	6.09
15. Wood, coal, etc.							
Wood (building) hard.....	Mhg ...	.62		551	104,445	341.62	Free.
Staves.....	...do.....	2.49	7,029	15,690	68,347	39,068.10	Free.
Wooden ware, sawed :							
Hard.....	...do.....	1.14	658	2,056	63,535	2,343.84	Free.
Soft.....	...do .....	.88	2,958	2,310	129,479	1,152.80	Free.
Wood, building.....	...do	9.74	34,495	13,979	45,479	13,615.55	Free.
Coal, anthracite.....	...do... ..	.26		100	40,482,666	26.00	Free.
16. Turners' and cutters' material.							
Cocoanut, coquilla nut shells, etc.	...do.....	6.50	213	522	63,628	3,393.00	Free.
Horns, and parts of.....	...do.....	20.30		53	14,727	1,075.90	Free.
Bones, split, drawn, or cut .....	...do.....	4.87		129	1,000	628.23	Free.
Amber.....	...do.....	539.98		2	517	1,079.96	Free.
Meerscham.....	...do	109.62		20	2,209	2,192.40	Free.
Mother-of-pearl .....	...do.....	41.87		357	17,504	14,946.59	Free.
Shells, various.....	...do.....	11.40		131	13,480	1,493.40	Free.
17. Minerals.							
Cobalt and nickel ore.....	...do.....	4.06		3,764	13,934	14,281.84	Free.
Ores, various, not specially enumerated.	...do.....	4.16		1	2,713	4.16	Free.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
17. Minerals—Continued.							
Porcelain clay and feldspar....	Mhg ...	\$1.22		203	29,854	\$247.66	Free.
Earths and minerals, various, not specially enumerated.	...do.....	1.00	74,083	108,195	701,772	108,195.00	Free.
18. Druggists' and Perfumers' raw materials.							
Ethereal oils, not specially enumerated.	Mhn ...	267.96		1.65	78.42	442.13	\$10.15
Under special tariff rates...	...do.....	324.80	39.5	48	628	15,590.40	6.09
19. Dyeing and tanning materials.							
Dyewoods :							
In blocks.....	Mhg...	3.45		1,743	75,147	6,013.35	Free.
Reduced in size.....	...do.....	3.86			3		.41
Under special tariff rates.	...do.....	3.86	9	2	3,190	7.72	.30
Fermented, under special rates.	...do.....	3.86	13	17	5,553	65.62	.30
Sumac.....	...do.....	3.85		308	41,635	1,185.80	Free.
Bark of oaks and firs and other trees, not specially enumerated.	...do.....	2.16	838	886	39,009	1,913.76	Free.
Myrobalan.....	...do.....	4.06		211	37,898	856.66	Free.
Roots, leaves, blossoms, berries, etc., various, used for tanning and dyeing purposes.	...do	9.34		29	13,535	270.86	Free.
Catechu.....	...do.....	10.56		49	10,850	517.44	Free.
Orlean.....	...do.....	15.43	3	3	272	46.29	Free.
Indigo, under special tariff rates.	...do.....	264.31		3	9,630	792.93	Free.
Tanning extracts, not specially enumerated under special tariff rates.	...do.....	4.87	350	476	5,524	2,318.12	.61
Dyeing extracts, not specially enumerated under special tariff rates.	...do.....	23.55	4,196	3,500	26,982	82,425.00	.61
20. Gums and resins.							
Colophony, under special tariff rates.	...do.....	2.18	27,026	158,248	269,365	344,980.64	Free.
Pitch, under special tariff rates.	...do.....	2.13	130	534	11,516	1,137.42	Free.
Asphalt, mastic, and bitumen, under special rates.	...do.....	2.84	53	13	7,465	36.92	.41
Turpentine and oil of turpentine.....	...do.....	7.99	3,212	3,628	40,418	28,987.72	.61
Oil of pitch, resin oil, etc., under special tariff rates.	...do.....	6.09	207	184	5,889	1,120.56	.61
Gum tragacanth and gamboge, under special tariff rates.	...do.....	77.14	4	5	1,344	385.70	.61
Shellac, copal, and dammar....	...do.....	44.66		15	10,735	669.90	Free.
Aloe, under special tariff rates.	...do.....	9.74		9	278	87.66	Free.
Gums and resins, not specially enumerated under special tariff rates.	...do.....	28.42		1,947	12,072	55,333.74	Free.
Balsams, natural, under special tariff rates.	...do.....	121.80	4	2	161.7	243.60	Free.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
21. Mineral oils.							
Mineral oil :							
Crude—							
Light.....	Mhn ...	\$1. 54	74,917	56,077	56,077	\$84,818. 58	\$.97
Fit for illuminating purposes.	...do.....	2. 82	128	42	91	118. 44	4. 06
Refined or half refined :							
Heavy—							
Dark.....	...do.....	2. 44	9,388	12,282	25,225	61,549. 00	1. 22
Light.....	...do.....	3. 05	3,486	1,366	32,822	4,166. 30	2. 03
Heavy.....	...do.....	3. 25	20,149	20,795	63,172	67,583. 75	2. 03
Light.....	...do.....	2. 84	31,274	39,840	48,968	113,145. 60	4. 06
22. Cotton and manufactures thereof.							
Cotton :							
Raw.....	Mhg....	16. 34	335,276	443,335	1,158,295	7,244,093. 90	Free.
Waste.....	...do.....	7. 61	7,689	14,421	91,876	109,743. 81	Free.
Cotton goods :							
Smooth, singly twisted—							
Colored, under special tariff rates.	Mhn....	100. 15	1	9	470	901. 35	20. 30
Printed, under special tariff rates.	...do.....	127. 24	5. 5	8	2,187	1,017. 92	24. 36
Figured, raw, under special tariff rates.	...do.....	83. 23	.....	1	72	83. 23	16. 24
Button goods.....	...do.....	89. 32	.....	. 5	4	44. 66	34. 51
23. Flax, hemp, jute, and manufactures thereof.							
Hemp, raw, roasted, broken, hackled, bleached.	Mhg ...	14. 82	418	774	63,502	11,470. 68	Free.
Jute.....	...do.....	7. 51	.....	2,300	338,517	17,273. 00	Free.
Other vegetable, fibrous spinning material, not specially enumerated.	...do.....	12. 16	.....	100	3,090	1,337. 60	Free.
Hemp yarns, raw, single.....	...do.....	27. 04	.....	87	7,557	2,352. 48	6. 09
Bags of jute.....	Mhn ...	16. 24	.....	2	802	32. 48	2. 44
24. Wool and manufactures of.							
Wool :							
Raw and waste.....	Mhg ...	39. 38	116	1,832	182,697	72,144. 16	Free.
Washed.....	...do.....	73. 08	.....	107	40,568	7,819. 56	Free.
In the flock.....	...do.....	50. 70	.....	31	20,285	1,571. 70	Free.
Hair, alpaca, cachemir, camel, goat, etc.	...do	44. 07	.....	35	637	1,542. 45	Free.
25. Silk and silk goods.							
Silk threads of all kinds.....	Mhn ...	267. 96	.....	.....	1. 1	.....	20. 30
Under special tariff rates...	...do.....	267. 96	.....	. 1	35	26. 80	14. 51
Silk goods, under special tariff rates.	...do.....	2,314. 20	. 1	. 2	668	462. 84	203. 00
26. Furnishing goods.							
Hats, not of straw.....	Each...	6. 87	.....	1	6,274	6. 87	16. 24
Gentlemen's woolen clothing...	Mhn ...	1,021. 00	.....	. 8	123. 3	816. 80	(*)

* Rate of principal constituent and 40 per cent.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
27. Sieve and brush makers' goods.							
Brush makers' ware, not specially enumerated.	Mhn ...	\$121.65	25	26.5	167	\$3,223.73	\$12.18
Brushes, fine, under special tariff rates.	...do.....	143.60	.....	1	165	143.60	8.12
28. Straw goods.							
Straw bands, under special tariff rates.	...do.....	293.03	.....	4	3,720	1,172.12	.81
Braids of chips for sieve bottoms, hats, table coverings, etc., not colored, under special tariff rates.	...do.....	211.12	.....	1	404	211.12	20
29. Paper and paper goods.							
Wood fiber.....	Mhg ...	6.90	.....	56	1,235	386.40	.20
Leather pasteboard.....	...do.....	28.42	.....	5	243	142.10	1.22
Slate paper and plates thereof..	...do.....	12.18	84	84	4,854	1,023.10	1.22
Paper, not specially enumerated.	Mhn ...	20.30	.....	.....	89	.....	2.03
Under special tariff rates...	Mhg ...	18.27	20	22	3,965	401.94	1.22
Lithographed, printed, or lined paper for labels, bills of lading, bills, etc., under special tariff rates.	Mhn ...	26.39	2	8	1,836	211.12	2.03
Gold and silvered paper and paper with gold and silver designs (genuine or imitation, also bronzed), under special tariff rates.	...do.....	89.32	.....	1	419	89.32	4.06
Paper ware, not specially enumerated, special tariff rates.	...do.....	28.42	24	35	6,370	994.70	4.87
Fine boxes and cartons, special tariff rates.	...do.....	40.60	2	2	677	81.20	7.31
Labels and vignettes in different colors, special rates.	...do	263.90	12	1	4,633	263.90	7.31
30. Caoutchouc, gutta-percha, and manufactures.							
Caoutchouc and gutta-percha, raw and purified.	Mhg ...	102.72	344	187	6,584	19,208.64	Free.
Rubber threads, not woven over.	...do.....	287.45	34	109	1,020	31,332.05	.61
Rubber, hard, in plates, tubes, etc.	Mhn ...	194.88	.....	1	526	194.88	2.44
Turners' and cutters' material, artificial.	...do.....	162.40	1	10	340	1,624.00	2.44
Hose of all kinds.....	...do.....	83.51	33	41	742	3,423.91	8.12
Rubber belting of all kinds.....	...do.....	107.20	19	18	343	1,929.60	8.12
Shoes.....	...do.....	131.77	.....	3	1,119	395.31	12.18
Rubber goods of soft rubber, special tariff rates.	...do.....	175.15	34	62	2,307	10,859.30	10.15
Clothing in connection with rubber, caoutchouc.	...do.....	442.54	1	5.5	88	2,433.97	20.30
Hard-rubber goods, not specially enumerated.	...do.....	255.78	9	7	355	1,790.56	28.42

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
<i>31. Oilcloth and oilskin.</i>							
Oilcloth, not specially enumerated.	Mhn ...	\$57. 61	5	2	918	\$115. 22	\$10. 15
<i>32. Leather and manufactures of.</i>							
Leather:							
Calf, common.....	...do.....	154. 69	5	132	1, 741	20, 419. 08	3. 65
Cattle, horse, black.....	...do.....	70. 20	58	193	1, 881	13, 548. 60	3. 65
Other, common.....	...do.....	62. 12	1, 132	1, 727	8, 813	107, 281. 24	3. 65
Russian, crocodile, seal, and hog, genuine or imitation, colored.	...do.....	253. 34	3	5	634	1, 266. 70	7. 31
Other fine.....	...do.....	158. 54	40	78	7, 787	14, 472. 12	3. 65
Belting .....	...do.....	147. 43	13	1	462	147. 43	10. 15
Under special tariff rates.	...do.....	145. 51	4. 5	15	574	2, 182. 65	8. 93
Sheepskins, tanned or split, not colored.	...do.....	63. 95		36	9, 244	2, 302. 20	2. 44
Sole leather.....	...do.....	47. 91	19		641		7. 31
Under special tariff rates..	...do.....	47. 91	3, 748	3, 644	7, 736	175, 574. 04	6. 09
Waste .....	...do.....	31. 46	383	297	3, 644	9, 343. 62	6. 09
Japanned (patent) leather.....	...do.....	246. 44	31	52	2, 232	12, 814. 88	3. 65
Ware, fine.....	...do.....	202. 69	18	22	1, 351	4, 459. 18	13. 20
<i>33. Furriers' ware.</i>							
Furs, prepared, of fine skins....	...do.....	475. 02		2	664	950. 04	20. 30
<i>34. Wooden and bone ware.</i>							
Wooden ware, rough, not painted.	Mhg ...	10. 15	103	95	4, 259	963. 25	. 61
Pegs, wooden.....	...do.....	8. 73	6, 483	7, 415	10, 361	64, 732. 95	61
Wooden ware:							
Most common.....	...do.....	8. 12	1, 292	2, 308	18, 090	18, 740. 90	. 61
Mounted.....	...do.....	17. 15		7	668	120. 05	1. 20
Most common—							
With mountings.....	...do.....	11. 37	6	13	1, 085	147. 81	1. 20
Painted, varnished, etc.	Mhn ...	20. 30	94	87	3, 139	1, 766. 10	2. 03
Petroleum barrels, empty.....	Mhg ...	2. 23	5, 669	7, 328	33, 788	16, 341. 44	Free.
Wooden furniture:							
Fine, not polished.....	Mhn ...	27. 33	25	27	1, 917	737. 91	2. 03
Painted, lacquered, varnished, and polished or in connection with bast, reed, cane, glass, metals, etc.	...do... ..	54. 84	25	31	993	1, 700. 04	2. 03
Furniture, upholstered, with covering.	...do.....	203. 84		11	389	2, 242. 24	12. 18
Turners' ware, fine.....	...do.....	91. 35		12	1, 056	1, 096. 20	6. 09
Wooden ware, fine, gilded, silvered, painted, etc.	.. do.....	52. 78	16	22	3, 673	1, 161. 16	6. 09
*Furniture of bent wood, with ornamental pressed parts, etc.	...do.....	20. 30		1	83	20. 30	6. 09
Veneers, not inlaid work, rough.	Mhg ...	39. 79	27	18	2, 592	716. 22	. 61

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
35. Glass and glassware.							
Bottles, transparent.....	Mhg ...	\$4.57	.....	1	93	\$4.57	\$1.22
Hollow glass, transparent :							
Cut.....	Mhn ...	12.28	9	2	391	24.56	2.44
Pressed.....	...do	7.51	5	3	522	22.53	2.44
Plate glass of all kinds, cut, with designs.	...do.....	26.11	.....	4	6,925	104.44	4.87
Glass, painted, gilded, silvered, glass paste, not set.	...do.....	24.52	.....	1	272	24.52	4.06
Venetian glass goods (enamel, drops, pearls, spun glass, in connection with caoutchouc, leather, etc., neither gilt nor silvered).	...do.....	115.71	.....	1	718	115.71	4.87
36. Stoneware.							
Grindstones and whetstones....	Mhg ...	2.64	2	26	35,398	68.64	Free.
Artificially made whetstones and pumice stones.	...do.....	13.40	.....	7	1,644	93.80	.81
37. Earthenware.							
Building ornaments (also of terra cotta), glazed or unglazed.	...do.....	16.16	.....	1	354	16.16	.20
Clay goods, not specially enumerated, painted in several colors.	Mhn ...	26.39	4	1	5,809	26.39	3.25
Porcelain, colored, bordered, painted, gilt, and silvered.	...do.....	64.96	.....	.....	304	.....	6.09
Under special tariff rates...	...do.....	64.96	2	2	3,024	129.92	4.06
Clay goods, in connection with other materials.	...do.....	30.46	7	12	661	365.52	4.87
38. Iron and manufactures thereof.							
Iron and steel, old and waste...	...do.....	1.22	.....	.....	981	.....	.32
Under special tariff rates...	...do.....	1.22	.....	1	148,762	1.22	.26
Sheet iron and plates, designed, marbled, varnished, less than 0.4 millimeter.	...do.....	8.53	20	37	411	315.61	3.65
Ornamental cast iron.....	...do.....	4.87	.....	3	286	14.61	1.62
Hardware, common, enameled.	...do.....	3.05	.....	2	411	6.10	2.64
Iron and steel ware, common :							
Polished, planed, coppered, tinned, zincked, etc.	...do.....	4.87	.....	10	1,125	48.70	3.25
Rough.....	...do.....	7.31	.....	46	12,554	336.26	1.62
Also in connection with wood or cast iron, coarsely painted, bored, partially painted, polished, planed.	...do.....	8.12	1	14	14,541	113.68	1.62
Springs, planed, turned, polished, coppered, zincked, or painted.	...do.....	8.12	1	2	1,655	16.24	3.25
Other common hardware, turned, polished, planed, coppered, etc.	...do.....	10.56	189	267	13,629	2,819.52	3.25

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
38. Iron and manufactures thereof—Continued.							
Wrought iron pipes, also connecting pieces.	Mhn ...	\$6.09	142	133	12,945	\$809.97	\$2.44
Nails .....	...do.....	7.31	1	4	2,048	29.24	2.64
Sheet iron, goods of, coppered, tinned, leaded, finely painted.	...do.....	15.02	20	51	5,615	766.02	4.87
Iron bands.....	...do.....	19.08	1	1	882	19.08	2.64
Springs for road vehicles.....	...do.....	14.62	.....	2	42	29.24	2.64
Brushes, bottoms of sieves, and common wire ware.	...do.....	13.40	2	3	1,139	40.20	3.25
Drills, weighing 500 grams and more.	...do.....	31.06	2	6	235	186.36	4.06
Hammers, weighing 500 grams and more.	...do.....	14.72	10	6	780	88.32	4.06
Axes, pincers, weighing 500 grams and more.	...do.....	20.45	75	63	1,441	1,288.35	4.06
Hay and dung forks.....	...do.....	14.72	54	100	2,339	1,472.16	4.06
Locks, keys, and parts of locks.	...do.....	28.44	8	21	3,538	597.24	4.06
Screws, having a diameter of at least 5 millimeters.	...do.....	18.50	.....	2	3,311	37.00	4.06
Polished saws.....	...do.....	53.09	2	6	3,481	318.54	6.09
Files and rasps under 25 centimeters long.	...do.....	82.74	1	10	1,313	827.38	6.09
Knives and scissors, coarse, for mechanics' and agricultural use.	...do.....	39.00	123	171	1,646	6,669.00	6.09
Tools weighing less than 500 grams.	...do.....	57.45	14	43	2,498	2,470.35	6.09
Castings, artistic and ornamental.	...do.....	13.80	11	19	1,759	262.20	4.87
Hardware, fine, in connection with other material.	...do.....	66.99	18	26	2,390	1,741.74	4.87
Iron and steel goods, polished, varnished, nickled, enameled.	.. do.....	70.64	51	103	6,643	7,275.92	8.12
Toys of iron or steel.....	...do.....	77.58	47	29	1,297	2,249.82	8.12
Iron and steel furniture, upholstered or covered and finely ornamented.	...do.....	183.30	.....	3	167	549.90	8.12
Cutlery.....	...do.....	103.14	4	4	1,595	412.56	18.27
Hand (pocket) firearms.....	...do.....	263.90	.....	5	416	1,319.50	18.27
Springs, excepting clock, watch, carriage, and furniture springs.	...do.....	26.80	14.5	40	400	1,072.00	12.18
Hooks and eyes, buckles, buttons, fishhooks, thimbles, etc.	...do.....	57.68	.....	3	1,131	173.08	12.18
39. Base metals and manufactures thereof.							
Lead and alloys, raw, old, broken, or waste.	Mhg ...	5.58	6	2,020	88,418	11,271.60	.80
Types and stereotype plates...	Mhn ...	44.78	.....	1	1,213	44.78	2.03
Zinc, raw, old, broken, or waste.	Mhg ...	8.53	.....	10	153,145	85.26	Free.
Copper, raw, old, broken, or waste.	...do.....	21.92	15,179	26,349	133,830	577,660.08	Free.

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
39. <i>Base metals and manufactures thereof</i> —Cont'd.							
Brass, raw, old, broken or waste.	Mhg ...	\$16.24	.....	79	19,553	\$1,282.98	Free.
Metal ware:							
Fine, not specially enumerated, also in connection with other material.	Mhn ...	48.72	16	36	6,816	1,753.92	\$7.31
Very best, of packfong, brass, red brass, and like alloys.	...do.....	125.05	8	11	4,560	1,375.55	16.24
Nickel ware.....	...do.....	284.20	.....	1	91	284.20	16.24
40. <i>Machines, apparatus, and parts thereof.</i>							
Frames for sewing and knitting machines.	...do.....	10.15	13	8	1,982	81.20	2.44
Tops of sewing and knitting machines and parts thereof.	...do.....	71.05	554	134	6,146	9,520.70	10.15
Sewing and knitting machines.	...do..... Each...	30.45	.....	2.4 4	212 361	73.08	6.09
Spinning and weaving machines for cotton or woolen waste.	Mhn ... Each...	25.58	.....	95 1	12,472 299	2,430.10	1.72
Thrashing machines.....	Mhn ... Each...	17.86	3 1	64 4	15,416 424	1,143.04	2.84
Agricultural machines of wood.	Mhn ... Each...	17.86	64 73	58 3	261 166	1,035.88	2.03
Machines, other, and apparatus of wood.	Mhn ...	17.86	27	82	1,422	1,464.52	2.03
Machines and apparatus of the base metals.	...do.....	23.55	.....	3	1,274	70.65	4.87
Steam engines, stationery.....	...do..... Each...	21.52	14 1	74 2	2,100 49	1,592.48	3.05
Gas and hot-air motors.....	Mhn ... Each...	27.61	.....	4 2	1,113 119	110.44	3.05
Motors, other, not specially enumerated.	Mhn ... Each...	19.49	7 1	24 5	824 111	467.76	3.05
Agricultural machines	Mhn ... Each...	16.24	.....	.....	21 12	.....	3.45
Under special tariff rates	Mhn ... Each...	16.24	1,614 1,191	2,492 1,493	11,975 7,180	40,470.08	3.05
Mining machines and apparatus.	Mhn ...	19.08	.....	132	1,044	2,518.56	3.05
Metal-working machines and apparatus.	...do.....	25.17	11	491	9,050	12,358.47	3.05
Wood-working machines and apparatus.	...do.....	21.92	65	35	5,814	767.20	3.05
Machines and apparatus, not specially enumerated.	...do.....	19.08	34	20	8,711	381.60	3.05
Complete, not specially enumerated.	...do.....	19.08	608	1,022	50,874	19,499.76	3.05
Parts of.....	...do.....	19.49	1,700	1,753	100,117	34,165.97	3.05
41. <i>Vehicles.</i>							
Wagons without leather or upholstery work.	Each...	72.27	2	30	117	2,168.10	10.15
Velocipedes.....	...do.....	58.87	1	13	3,644	765.31	10.15

Description.	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
41. Vehicles—Continued.							
Wagons with leather and upholstery work.	Each...	\$383.67	7	3	55	\$1,151.01	\$30.45
Sleighs with leather and upholstery work.	...do.....	150.22		2	5	300.44	30.45
Wagons, not upholstered.....	Mhn ...	25.58	6	23	135	588.34	3.25
	Each...		10	37	50		
43. Instruments, watches, etc.							
Optical instruments.....	Mhn ...	564.34		1	108	564.34	81.20
Opera glasses.....	...do.....	564.34		5.5	135	3,103.87	50.75
Instruments, various, not specially enumerated.	...do.....	336.98	35.5	64.5	1,400	21,735.21	20.30
Pianos.....	...do.....	56.84		4	738	227.36	8.12
	Each...			2	322		
Harmoniums.....	Mhn ...	101.50	3	2	2	203.00	16.24
	Each...		4				
Under special tariff rates	Mhn ...	101.50	64	99.5	261.5	10,099.25	8.12
	Each...		68	100	302		
Key instruments, other.....	Mhn ...	81.20		3.5	117	284.20	8.12
Musical instruments, various...	...do.....	103.97		5	2,316	519.85	4.06
Watches:							
With cases, the smaller part of which is gold or gilt.	Each...	10.15	55	162	70,854	1,644.30	.41
With gilt cases.....	...do.....	2.44		1	689	2.44	.30
With silver cases or plated..	...do.....	2.44		2	41,555	4.88	.20
With other cases, gilt or part gilt, or plated.	...do.....	1.62	135	3	43,620	4.86	.12
With silver cases.....	...do.....	2.44	19	16	239,446	39.04	.12
With other cases.....	...do.....	1.22	31	43	101,984	52.46	.12
Goldsmiths' ware.....	Mhn ...	81,200.00	.04	.23	24.39	18,676.00	121.80
Silversmiths' ware.....	...do.....	4,466.00		.42	109.33	1,875.72	121.80
Platinum ware.....	...do.....	25,578.00	.03	.06	2.05	1,534.68	121.80
Gold leaf, pure.....	...do.....	4,669.00		.02	6.68	93.38	81.20
Teeth, artificial.....	...do.....	8,526.00	.39	2.50	8.18	21,315.00	40.60
Hardware, very best, in connection with silk, lace, artificial flowers, feathers, etc., special rates.	...do.....	511.56		2.40	12 488	1,227.74	30.45
45. Chemicals.							
Potash containing more than 85 per cent of potassium carbonate.	Mhg ...	8.53		7	835	59.71	.32
Copper, vitrous.....	...do.....	7.31		172	19,164	1,257.32	.61
Zinc oxide, white.....	...do.....	10.56	569	121	6,361	1,277.76	1.22
Pyrolignite of lime.....	...do.....	4.06	1,614	4,115	4,897	1,670.69	1.22
46. Chemical products, medicaments, colors, and perfumery.							
Soot, carbon powder, etc...	...do.....	6.09	80	61	6,259	371.49	.61
Glue.....	Mhn ...	18.27		23	2,498	420.21	1.62
Gelatin.....	...do.....	60.90			5		
Under special tariff rates...	...do.....	60.90		3	1,133	182.70	1.62
Starch.....	...do.....	9.34		6	5,364	56.04	2.44
Tar paints.....	...do.....	85.26			8		
Under special tariff rates...	Mhg ...	81.20		3	16,651	243.60	.61

Description	Unit.	Value of unit.	Quantity of imports from the United States.		Total quantity of imports in 1894.	Value of imports from the United States in 1894.	Duty.
			1893.	1894.			
<i>46. Chemical products, etc.—Continued</i>							
Coloring matter, organic, artificially prepared.	Mhg ...	\$36.54	14	29	4,061	\$1,059.66	\$.61
Colors, various, not specially enumerated.	Mhn ...	40.60	.....	1	2,952	40.60	4.06
Chemical products, various, not specially enumerated.	...do.....	36.54	10	28	11,520	1,023.12	4.06
Ink and ink powder.....	...do.....	20.30	28	4	149	81.20	4.06
Pencils, lead, blue and colored.	...do... ..	40.60	3	2	412.50	81.80	7.31
Varnish.....	...do.	60.90	294	244	3,310	14,859.60	9.74
Medicines, prepared.....	...do.....	142.10	54	70	1,510	9,947.00	9.74
<i>48. Candles and soap.</i>							
Soap, fine, perfumed, or in tablets, balls, boxes, etc	...do.....	22.33	10	22	1,399	491.25	6.09
<i>49. Explosives.</i>							
Caps and empty cartridges.....	...do.	93.38	.....	.5	237	46.69	.....
<i>50. Books of literature and art.</i>							
Bound books.....	.....	.....	4	16	11,081	.....	Free.
Papers, pamphlets, almanacs, etc.	.....	.....	23	24	40,564	.....	Free.
Engravings, lithographs, woodcuts, photographs.	.....	.....	3	6	2,576	.....	Free.
Paintings.....	.....	.....	.....	5.5	1,131	.....	Free.
<i>51. Offal.</i>							
Dung, animal.....	Mhg ...	.96	11	102	12,018	97.92	Free.
Fertilizers, artificial.....	...do.....	1.65	24,104	43,163	387,374	71,218.95	Free.
Bone ashes and bone meal for fertilizing purposes.	...do.....	2.44	10,853	36,325	270,316	88,633.00	Free.
Oil cake, etc.....	...do.....	2.03	1,002	303	39,393	715.09	Free.
Glass, fragments of... ..	...do.....	.71	2	5	47,364	3.55	Free.
Old ropes and nets.....	...do.....	58.87	11	5	520	294.35	Free.

FREIGHT RATES.

As to freight rates, two possibilities present themselves—one by means of railroads, the other by way of the Elbe River, which is navigable as far as Laube, Bohemia. The competition in all branches of commerce being extremely close, it is certainly of the greatest importance to compare the rates charged on these two routes. It is well-nigh self-evident that transportation by means of the Elbe is by far the cheaper. But this is not the only thing to be considered; in a great many instances, the question of time during which goods are being transported is as weighty as that of the rate itself.

Upon inquiry, I find that a fast river steamer requires from five to eight days to make the trip from Hamburg to Bohemia, while a slow freight boat

would necessitate from ten to fourteen days. The railroad companies, on the other hand, cover the same distance in from two to six days, though articles transported as fast freight may be delivered in Reichenberg within twelve to twenty hours after having left Hamburg or Bremen. The usual transportation charges per 100 kilograms* are: From Hamburg to Reichenberg—fast freight, \$3.01; common freight, \$1.49; carload (10,000 kilograms), 95 cents; carload, 82 cents. From Bremen to Reichenberg—fast freight, \$3.32; common freight, \$1.65; carload (10,000 kilograms), \$1.03; carload, 91 cents.

River transportation charges are far cheaper, and it will not cause surprise to be told that half the goods transported from Hamburg to Bohemia during the summer months are sent by way of this route.

I append a list of the more important articles and the freight charges for the same. The first column gives the rate for 100 kilograms, the depth of the river being not more than 120 centimeters (47.2 inches) below 0, according to the Dresden "Pegel," while the second column gives the same, providing the depth is more than 120 centimeters below 0. In the third and fourth columns, are the freight charges for 100 kilograms, transportation being carried on by slow freight boats. As these charges vary considerably, I have thought it best to take the average for the year 1893, which was the most satisfactory as regards natural influences, and also the average for the year 1894, the most unsatisfactory in this respect. Though these rates are as correct as may be obtained, I would advise every exporter who wishes to make use of the river transportation to apply for special rates, and I have no doubt he will obtain at least some discount. In many instances, the insurance is included in the freight rates:

Freight rates per 100 kilograms (220.46 pounds).

Articles.	Fast freight.		Slow freight.	
	I.	II.	1894.	1893.
Ammoniac	\$0.55	\$0.31	\$0.12	\$0.19
Apples, dried.....	.38	.45	.14	.214
Asphalt:				
In cases.....	.24	.29	.13	.20
In bags.....	.38	.45	.13	.20
Bast, straw.....	.36	.43	.15	.224
Beer.....	.38	.45		
Bedfeathers:				
Pressed into bales.....	.33	.40	.18	.25
Not pressed.....	.54	.54		
Belting, leather.....	.50	.61	.18	.25
Blubber.....	.35	.42	.13	.20
Bone black.....	.27	.33	.12	.19
Bone dust.....	.24	.29	.12	.19
Borate, calcium.....	.24	.29	.13	.20
Borax.....	.39	.40	.14	.214
Cacao beans.....	.42	.50	.15	.224
Camphor .....	.39	.50	.18	.25

* 1 kilogram=2.2046 pounds.

Freight rates per 100 kilograms (220.46 pounds)—Continued.

Articles.	Fast freight.		Slow freight.	
	I.	II.	1894.	1893.
Canes.....	\$0.37	\$0.44	\$0.15	\$0.224
Caoutchouc and goods.....	.51	.62		
Catechu.....	.33	.40	.14	.214
Cement.....	.24	.29	.12	.19
Chlorate, calcium.....	.37	.44	.14	.214
Clover seed.....	.42	.50	.15	.224
Coffee.....	.42	.50	.15	.224
Conserves.....	.46	.55		
Cork wood.....	.43	.43	.18	.25
Copal.....	.38	.45	.15	.224
Copper, raw.....	.30	.36	.13	.20
Corn.....	.27	.33	.12	.19
Cotton :				
Goods.....	.42	.50		
Raw—				
Pressed into bales.....	.32	.39	.18	.25
Not pressed into bales.....	.45	.45	.18	.25
Waste.....	.32	.45	.15	.224
Yarn.....	.42	.50	.15	.224
Cotton-seed meal.....	.30	.36	.12	.19
Cotton-seed oil.....	.35	.42	.13	.20
Earths :				
In cases.....	.24	.29	.13	.20
Loose.....			.13	.20
Coloring, in cases.....	.24	.29	.13	.20
Emery plates and paper.....	.35	.44	.13	.20
Fats.....	.35	.42	.13	.20
Ginger.....	.39	.46		
Glass :				
Cut.....	.39	.46		
Plate.....	.35	.42		
Grain.....	.27	.33	.12	.19
Grapes, dried.....	.39	.46	.14	.214
Graphite.....	.26	.35	.13	.20
Grass seed.....	.38	.45	.15	.224
Gums and resins.....	.38	.62	.15	.224
Gut.....	.37	.85	.14	.214
Hardware :				
In cases.....			.13	.20
Not in cases.....	.51	.62	.14	.214
Hides :				
Dried.....	.42	.50	.18	.25
Salted.....	.38	.45	.14	.214
Honey.....	.36	.43	.18	.25
Indigo.....	.68	.78		
Iron :				
Pig.....	.27	.33	.13	.20
Polished.....	.37	.44		
Raw.....	.24	.29	.12	.19
Iron and steel ware :				
In cases.....			.13	.20
Not in cases.....	.51	.62	.14	.214
Japonica.....	.33	.40	.14	.214
Jute :				
Linen.....	.35	.42	.14	.214
Raw.....	.29	.35	.12	.19
Waste.....			.14	.214
Lead.....	.27	.33	.12	.19

Freight rates per 100 kilograms (220.46 pounds)—Continued.

Articles.	Fast freight.		Slow freight.	
	I.	II.	1894.	1893.
Leather.....	\$0.46	\$0.55	\$0.18	\$0.25
Goods.....	.59	.61	.....	.....
Waste.....	.42	.50	.16	.25
Linen :				
Goods.....	.44	.52	.14	.214
Yarn .....	.42	.50	.15	.224
Linseed oil.....	.35	.42	.13	.20
Lubricating oil.....	.35	.42	.13	.20
Machines :				
Agricultural.....	.51	.51	.14	.214
Parts of.....	.35	.51	.14	.214
Sewing .....	.46	.55	.14	.214
Malt.....	.30	.36	.12	.19
Meats, in cases.....	.45	.55	.....	.....
Metal, broken.....	.35	.42	.13	.20
Mother-of-pearl .....	.39	.48	.....	.....
Nails.....	.27	.33	.12	.19
Nuts .....	.43	.51	.15	.224
Ocher.....	.25	.30	.13	.20
Oils :				
Aniline .....	.42	.50	.13	.20
Castor.....	.38	.45	.13	.20
Cotton-seed.....	.35	.42	.13	.20
Fatty.....	.37	.44	.13	.20
Linseed.....	.35	.42	.13	.20
Olive .....	.39	.46	.13	.20
Turpentine.....	.40	.49	.15	.224
Oilcloth.....	.46	.55	.....	.....
Olein.....	.37	.44	.13	.20
Ore :				
In cases.....	.26	.31	.13	.20
Loose.....	.....	.....	.12	.19
Paper.....	.35	.44	.....	.....
Paraffin.....	.35	.42	.13	.20
Pegs, wooden.....	.30	.36	.14	.214
Petroleum.....	.35	.45	.14	.214
Potash .....	.35	.42	.14	.214
Prunes, dried.....	.42	.50	.18	.25
Rags .....	.39	.46	.18	.25
Raisins.....	.39	.46	.14	.214
Rice .....	.24	.29	.13	.20
Meal .....	.32	.38	.14	.214
Roots.....	.46	.55	.18	.25
Straw.....	.40	.40	.18	.25
Rubber goods.....	.51	.62	.....	.....
Rum .....	.46	.55	.....	.....
Sackcloth.....	.35	.42	.14	.214
Saltpeter :				
Chile .....	.24	.29	.12	.19
Refined.....	.30	.36	.14	.214
Seeds, not specially enumerated.....	.42	.50	.15	.224
Shellac.....	.42	.49	.14	.214
Spermaceti.....	.42	.49	.14	.214
Spices, not specially enumerated.....	.54	.64	.18	.25
Stearin .....	.35	.42	.14	.214
Sulphur :				
Flowers.....	.30	.36	.13	.20
Raw.....	.27	.33	.13	.20

Freight rates per 100 kilograms (220.46 pounds)—Continued.

Articles.	Fast freight.		Slow freight.	
	I.	II.	1894.	1893.
Sumac.....	\$0.33	\$0.40	\$0.15	\$0.224
Sirup.....	.36	.43	.14	.214
Tallow :				
Animal.....	.35	.42	.13	.20
Vegetable.....	.37	.44	.13	.20
Tanning materials, not specially enumerated.....	.36	.43	.14	.214
Turpentine.....	.40	.49	.15	.224
Tin.....	.38	.45	.13	.20
Plate.....	.27	.36	.13	.20
Twist.....	.42	.50	.15	.224
Veneer.....	.44	.52	.15	.224
Wax :				
Bees'.....	.42	.50		
Vegetable.....	.39	.46		
Wine.....	.46	.55	.14	21.4
Wood :				
In blocks.....	.37	.44	.13	.20
Cut.....	.39	.46	.13	.20
Wooden ware :				
Common.....	.32	.38		
Canes.....	.37	.44	.15	.224
Dyewoods :				
In blocks.....	.30	.36	.13	.20
Extracts.....	.36	.43	.14	.214
Roots.....	.44	.52	.18	.25
Wool :				
In bales, pressed.....	.37	.44	.15	.224
Loose.....			.18	.25
Yarns :				
Cotton.....	.42	.50	.15	.224
Hemp.....	.42	.50	.15	.224
Jute.....	.32	.39	.15	.224
Linen.....	.42	.50	.15	.224
Woolen.....	.46	.55	.15	.224
Zinc.....	.32	.38	.13	.20

GEORGE R. ERNST,

Consul.

REICHENBERG, July 10, 1895.

THE ELECTRIC PLOW IN GERMANY.

In compliance with instructions received from the Department May 27, I have visited the factory of Messrs. Zimmermann & Co., manufacturers of the electric plow, and herewith submit a report on this new and useful invention.

Although steam plows, in conjunction with locomobiles, have in the last thirty years shown great advantages over manual and animal labor, several objections thereto are irremediable, notably (1) their cost, (2) the expense of fuel and attendance, (3) the necessary water supply, (4) their size and

No. 181—3.

weight, and (5) their inapplicability to small farms for the first four reasons, and small farms form an important part in this question of national economy.

Size and weight are serious elements, in view of the looseness of the soil under treatment.

Locomobiles, owing to their long periods of inaction during the year, waste an immense amount of motive power. Moreover, the rate of payment is, for such reason, very high.

Electromotors, on the other hand, are (1) far less expensive to make; (2) far lighter in their construction, and, consequently, more portable; (3) they can be used at a far greater distance from the actual source of power, thus saving much haulage.

A stationary engine or locomobile for farming on a large scale transfers its elementary power through an electromotor to the seesaw, tilting, or balance plow, the motor being mounted on the plow itself, thus avoiding wire-rope traction. The anchor shaft of the motor sets in motion a double spur wheel, which, in turn, drives a pinioned shaft.

ANCHOR.

A chain extended over the field and held taut at both ends by triple ground anchors is worked by this pinioned shaft, which draws the plow along the chain across the field. On reaching the end of the chain, the plow is tilted to the other side, and the simple reversal of the current sets the plow in motion in the opposite direction. In returning, it deposits the chain sideways ready for the next row of furrows. A laborer, by turning a lever, draws up the three ground anchors, and, by this simple action, sets the traveling wheels affixed to the anchor axles in motion, so that the anchors are easily moved to the next furrow. The motor tightens the chain before starting; the slack length of chain thus deposited behind the plow allows

THE ELECTRIC PLOW IN SMALL FARMING.

for any inequalities of length resulting from the shifting of the anchors, which are also provided with a spare length of loose chain for use in case of need.

THE ELECTRIC PLOW IN SMALL HUSBANDRY.

There are three factors to be considered, viz, (1) the source of power, or primary station; (2) the transmission of such power; (3) the tilting plow, with its electromotor

(1) *The source of power.*—This may be any ordinary agricultural locomobile of from 8 to 12 horsepower, but special care must be taken to furnish it with as sensitive a regulator as possible, in order to be able to surmount the irregularities liable to occur in switching the electromotor on and off, and also to prevent the occurrence of too great fluctuations in the number of revolutions. The locomobile may stand on any solid ground at the edge of the field to be plowed. It drives the dynamo machine (electricity generator), which is placed on a car.

DYNAMO MACHINE.

This car also serves to transport the gauging apparatus for measuring the strength of current and tension, a reel or windle for the cable, as well as for bringing the plow to the field. One end of the tipping plow is fastened behind this primary-station car by means of a cramp iron, while the guiding roller in the rear is placed so far downwards as to rest on the ground and thus guide the plow. Locomobile and primary station together are thus brought to the desired spot with one team. As soon as the locomobile is set up accurately by means of brake blocks, the dynamo car is placed straight before it, fastened into the ground by means of an anchor placed opposite to the belt tension; the driving belt is placed over the driving wheel of the locomobile and the disc of the pulley of the dynamo machine, and the pri-

mary station is then in working order. The dynamo machine and gauging apparatus are protected against the weather by means of a cover. As the primary station is overlooked by the fireman of the locomobile, the dynamo machine does not require a special attendant.

(2) *The transmission of power.*—Two cables, corresponding with the two poles, serves to transfer the electric power from the dynamo machine to the electromotor. One end of this pair of cables is affixed to a projecting bar of the plow and moves backward and forward with it, like a pendulum, while the other pair of ends is secured to the dynamo machine.

CABLE CAR.

The friction of the cable on the ground is avoided by means of light cable carriages fitted with insulating nippers. These carriages follow each motion of the plow automatically, as the wheels are fitted into forks which, pivoting in every direction, answer to all the movements of the plow.

Five or six such cable carriages, according to the length of the area to be plowed, are easily watched by a boy, who has to take care that, in reversing the motion of the plow, they follow such motion.

(3) *The tilting plow, with electromotor.*—A tilting plow for small husbandry is fitted with two shares on each side. In front of each of these is a forecutter to prepare the ground. The frame and body, as also all other parts of the plow, are of iron and steel and so strongly made that it is powerful enough to cut furrows to the depth of from 25 to 28 centimeters (10 to 11 inches), even in heavy, clogging ground. The plow may also be fitted with underground looseners, which follow the plow and loosen the subsoil to as much as 40 centimeters ($15\frac{3}{4}$ inches) in depth, but do not turn it over.

The iron frame of the tipping plow bears in the center shaft an arrangement on which are two main wheels of different diameters; these are adjustable perpendicularly and turnable sideways. The adjusting, or placing of the wheels, is easily effected from the driver's seat by means of a spiral and wheel, so that the driver has the plow under thorough control. An electro-

motor is mounted on the plow frame. A spur wheel is wedged on to the motor's anchor shaft. The motion of the electromotor is transmitted from this spur wheel with the aid of an intermediate appliance to a roller with a chain wheel. The dimensions of this appliance, which is made of cast steel, are so determined that the compass of the chain wheel receives a lineal speed of 70 meters per minute. The plow is, therefore, moved at this rate of speed across the field by means of the stretched-out chain, the links of which are 11 millimeters (seven-sixteenths of an inch) thick.

TWO-SHARE PLOW

The chain is directed on to the chain wheel by guiding rollers in such manner that the tautly stretched chain end is constantly striving to raise the forward end of the plow as well as to press the rear end into the soil. This results in a steady and certain progression of the plow, enabling one with this implement to throw stubble from 10 to 15 centimeters (4 to 6 inches) in height flat down, and to cut seed ridges.

To this end, special peeling or shelling apparatus are constructed, which, after removal of the plowing arrangement, are affixed to the frame of the tipping plow in the simplest manner, the operation being easily performed in a short time by any plow driver.

The mode of proceeding to the next row of furrows and reversing the motion of the plow have already been explained.

THE ELECTRIC PLOW IN HUSBANDRY ON A LARGE SCALE.

For extensive farming operations, the aim was to produce an electric plow capable of plowing 4 to 5 hectares (1 hectare=2.471 acres) to a depth of 35 centimeters ($13\frac{3}{4}$ inches) in ten hours. As this requires about 35 horsepower, the ordinary locomobiles at hand are not available. But, on the other hand, any ordinary stationary engine is capable of supplying the elementary power necessary to run the dynamo machine under specially advantageous conditions. In fact, a properly fitted stationary engine will always work more economically than a portable engine, which will frequently burn

up to 10 kilograms (22.046 pounds) of coal per hour per square meter of heated surface. The expense of water carting is also dispensed with.

As in the case of small farming, the operation is comprised under three headings, viz, (1) the primary station, (2) the transmission of power, and (3) the plow, with electromotor.

(1) *The primary station.*—A dynamo machine of the requisite power is attached by driving belts to the stationary engine, being, of course, fitted with the necessary appliances for gauging the force of the current and the tension. Water power, where available in the necessary degree, may be very advantageously used to drive the dynamo machine, which can be done either by taking the power direct from the turbine or the water wheel or by indirect beltings.

Here, again, it is essential that the elementary machine be prevented, by the introduction of suitable regulators, from too much variation in its revolutions. In like manner, when land is being reclaimed or improved, the stationary power must be used rationally. Thus, instead of the driving machinery of the pumping works, a dynamo machine should be used to produce the electricity, which can be conducted thence to any desired distance and for any wished-for purpose. It is only in such manner that a stationary engine can be intelligently turned to account in husbandry, inasmuch as uninterrupted use materially reduces the cost of creating steam, both per hour and per horsepower. Moreover, as the electric current is available, the electric plow may, with the aid of electric light, be worked all night.

(2) *Transmission of power.*—Two bare copper wires are carried from the dynamo machine to the field which is to be plowed, in like manner as telegraph wires are borne, namely, on poles. According to the size of the field, this connection by copper wire is either brought to the further end of the field, or where its length is 800 to 1,000 meters (2,625 to 3,281 feet), to the center division line of the field's length. Both the cables are affixed to the copper wires by nippers in such a way that they can be easily moved backward or forward. These cables are borne by the cable carriages and move forward and backward with the plow like a pendulum.

FOUR-SHARE PLOW.

(3) *The plow, with electromotor.*—A three or a four-share plow is used for husbandry on a large scale. It is made on the same principle as the two-

share implement, already described, only proportionately stouter. The frame of the tipping plow, which carries the cast steel plowing contrivance, as its dimensions, etc., necessitate, is made of strong iron and carries a proportionately powerful electromotor; this, by means of an intermediate wheel gear, sets a chain wheel in motion, which, in turn, draws the plow along the chain stretched across the field. Both the chain and its ground anchors are like those used with the two-share plow, only corresponding in power to the demands made upon them. These anchors require two men to turn them. One of them may be the plow driver, while another man is stationed at each anchor to help in tipping the plow and shifting the anchor.

The reversing and resistance gear is easily handled from both of the driving seats, so that the driver, while guiding the plow with ease, has at the same time control of its motions. The depth of the furrows is determined by adjustable rollers. The transport of this tipping plow to the field is effected in exactly the same manner as already described.

WORKING EXPENSES OF THE ELECTRIC TILTING PLOW.

(1) *Two-share plow in small farming.*—The experiments were made on heavy, binding, loamy clay soil near Halle-on-the-Saale. A 10-horsepower locomobile, fitted with a very exact regulator, was used, with the following result: Gauges showed a current tension of 110 volts and a current force of 60 to 80 ampères, an average of 8,000 volt ampères (watt), this being equal to the capacity of the locomobile up to 11 horsepower. Two furrows 60 centimeters broad by 24 centimeters deep ($23\frac{5}{8}$ by $9\frac{1}{2}$ inches) at each plowing. Power gauge varied between 600 and 700 kilograms (1,344 and 1,568 pounds), giving a mean of 650 kilograms (1,456 pounds) a resistance of from 45 to 48 kilograms (100.8 to $107\frac{1}{2}$ pounds) per square decimeter (3.937 inches) of the cross section of a furrow.

At a progression of 0.9 meter per second, 7.8 horsepower was made really useful, so that the loss of power between locomobile (11 electric horsepower) and plowing (7.8 horsepower), arising from transmission of power and tooth and chain friction, was 3.2 horsepower. Compared with the loss shown by steam plows, this is exceedingly small.

Ignoring the purchase money for the locomobile, as most farms have one for thrashing purposes, the cost of working was:

	Marks.
1 fireman, ten hours.....	3.50
1 driver, ten hours.....	3.50
2 boys, ten hours.....	3.00
Interest and sinking fund for working capital and repairs, excluding electromotor, on	
6,750 marks, 20 per cent per 100 days.....	13.50
On 1,750 marks (motor complete), 15 per cent per 100 days.....	2.62
On chain, 50 per cent on 480 marks, 100 days.....	2.40
Fuel, 400 kilograms at 2.25 marks.....	9.00
Lubrication of locomobile, dynamo machine, electromotor, and plow.....	2.00
Two loads of water.....	4.00
Total.....	43.52

With 8 acres in ten hours, on heavy soil, with a depth of 24 centimeters (9.24 inches), the cost would be 5.44 marks (\$1.29) per acre, as against 12 marks (\$2.74), the cost of doing the work with oxen. In comparing with the cost of the latter, even with a depth of furrow of from 30 to 35 centimeters (11.8 to 13.8 inches), the electric plow is still by far the cheaper.

One boy drilled to the work would suffice.

In many positions, the locomobile could feed the boiler from an automatic pump. These two items would reduce the daily cost by 5.50 marks (\$1.31), bringing it down to 4.80 marks (\$1.14) per acre.

The economy effected is so self-evident as to render argument superfluous.

(2) *In large farming.*—A comparison with the steam plow is necessary in order to make the following statistics intelligible:

The cost of steam plowing to a depth of 35 centimeters (13.8 inches), evidently with variety in character of soil, is stated by two German authorities at 39.36 marks (\$9.37) and 46.72 marks (\$11.12), respectively, per hectare (2.47 acres), whereas both give the cost of plowing with oxen at 50 marks (\$11.90) per hectare. And, moreover, a steam plow costs 60,000 marks (\$14,280), as capital to be provided for.

As against this, the large electric plow shows: (1) Cost of stationary steam engine (semilocomobile) complete, 40 to 45 horsepower, 13,000 marks (\$3,094); (2) dynamo machine, including foundations and driving belts to produce 33,000 watts per hour, together with the necessary gauges, 5,000 marks (\$1,190); (3) electric conduits, complete, including labor, etc., 3 kilometers (1.86 miles) in length (in many districts poles would be cheaper), 4,500 marks (\$1,190); making the expenses (sinking fund, interest, wages, coal, etc.) 34.94 marks per day of 10 hours, or 3.494 marks (83 cents) per hour for 3,300 watts, not including transmission loss, which brings the cost up to 11.7 pfennigs (2.8 cents) per 100 watts.

The results hitherto obtained show that, with a motive power of 33,000 watts, it may be guaranteed that 4 square hectares can be plowed 35 centimeters deep in ten hours. This would show:

	Marks.
30. X 11,7010.....	35.10
Wages, two hands.....	10.00
Sinking fund, interest, and repairs, 20 per cent on the fitting up of the complete plowing gear, without the chain, capital sum 10,300 marks..	2,060.00
Chain, 50 per cent on 830 marks, its cost.....	415.00
Total.....	2,475.00
Taking an average of 100 working days of ten hours per annum this would show, per day.....	24.75
Total cost per day.....	69.85

Or, in round figures—4 hectares in ten hours—per day, 70 marks.

It is thus evident that the working expenses of the electric plow for extensive husbandry amount to less than half of those incurred in working the

steam plow. This contrast is readily explained, for (1) the capital sunk in the plant is only one-third of that required for the steam plow; (2) the expenses connected with the generating of power are materially lower than is the case with the steam plow, in which a very considerable surplus power has to be raised in order to work the pulleys and brakes and to overcome the stiffness of the rope; (3) the expensive transport of water is herein entirely done away with.

I have been informed by the director of the Haale factory that electricity will shortly also be used in digging out potatoes and sugar beets.

OTTO DOEDERLEIN,
Consul.

LEIPSIC, *July 15, 1895.*

MARBLES, EARTHENWARE, AND MINERALS IN SPAIN.

MARBLES.

Spain contains many fine marble quarries, but neither in times remote nor modern has she made any serious efforts to bring them into competition either at home or abroad with the quarries of Italy, France, and Belgium. The best Spanish marbles are the white, of Fuenteheridos, in the Province of Huelva; the colored, of Navalmoral, Santa Marta, Galicia, the Asturias, Almeria, Malaga, and Murcia; the grayish black, of Jaca; the spotted, of San Esteban de Castellá; the yellow, of Tortosa and Azpeitia; the whitish gray, of Figueras; the azure, of Gerona; and the blood red, of Vizcaya. The industry of sawing marble is developing rapidly in Barcelona, Bilbao, Macael, and Malaga, owing to the duties imposed on the importations of like material from other countries.

BRICKS AND TILES.

Barcelona, Valencia, Alicante, and Seville are all producing large quantities of bricks and tiles, and are now able to meet more than the native demand for them. The mosaics and painted tiles for floors that are made in Barcelona and which are in general use here are excellent not only as to design, but as to durability.

CERAMICS, DELFT, AND PORCELAIN.

The various arts of producing useful and ornamental objects from earth are cultivated seriously and successfully in Spain. Some of the Spanish jars, vases, and plates are of exquisite workmanship, and are purchased in considerable numbers by the Cubans and South Americans, as well as by the French. Much work is also done here for the Germans after German designs.

GLASS AND CRYSTAL.

There are eighty-seven glass and crystal manufactories in Spain, and they produce not only enough for ordinary native use but for exportation. Bottles for wines, liquors, and oils are turned out on a grand scale in Barcelona, and demijohns innumerable proceed from the factories of Palma.

Fancy glass and stained windows are also manufactured in and near Barcelona, and are comparable with the best work done in Italy and France.

Looking glasses are made in Saragossa, Valencia, Madrid, and Barcelona, but they are inferior to those produced in England, France, Germany, Austria, and the United States.

MINERALS.

Spain is exceedingly rich in minerals. In the north, she has iron in Vizcaya, Santander, and Oviedo; pit coal in Oviedo, León, and Pavencia; zinc in Santander, Guipúzcoa, and Vizcaya; cobalt in Oviedo; and sulphate of soda in Burgos. In the center, she has quicksilver in Ciudad Real, pit coal in Córdoba, phosphorus in Cáceres and Huelva, and salt and silver in Guadalajara. In the south, she has lead mines in Murcia, Jaen, and Almeria; iron in Huelva and Seville; and sulphur in Murcia and Almeria.

The annual production of these mines is about \$50,000,000, and it could be very much greater if the machinery employed were better, if the railways were conveniently near, if freights were cheaper, and if the employers had more capital and the employees more energy.

The quantity of minerals obtained from the Spanish mines during the year 1894 was as follows: Quicksilver, 19,728 tons; lead, 151,000 tons; iron, 4,972,655 tons; copper, 2,270,000 tons; zinc, 34,000 tons; tin, 23 tons; antimony, 15 tons; salt, 533,280 tons; and silver, 59,000 kilograms.

MINERAL WATER.

Spain has numberless mineral springs. The best known of her waters are the Rubinat, Mondariz, Loeches, and Esperanza. The Rubinat is exported in large quantities.

HERBERT W. BOWEN,
Consul-General.

• BARCELONA, *June 12, 1895.*

RAMIE SPINNING MACHINERY.

The great interest exhibited in the United States recently in the fiber known as ramie, or rhea, and the numerous inquiries therefrom concerning it have led me to make an investigation of the subject. It appears that the fact that the sails for some celebrated American yachts have been made of this material instead of cotton has spurred manufacturers onward and made them desirous of being able to produce it, should a demand spring up. For that reason, one important manufacturer has been in this country inquiring

as to machinery, methods of spinning, weaving, etc. Others have written for information.

The spinning of ramie has been carried on at different times by various firms in this district. In every case the production has been abandoned for the reason that there was not sufficient demand for the yarn to make it a profitable product. I am told by an eminent authority, however, that the sole reason for this was because the fiber was produced from a raw material that was immature, coarse, and unfit for such use. Mr. Felix Max Raabe, a gentleman who has given the thoughtful study of a lifetime to such fibers as flax, hemp, and ramie, assured me that the only reason that the ramie product so far has been a failure financially is because it is harvested when the stalks are green, full of juice, and tender, instead of when they are mature and the fiber has attained its full strength, softness, and fineness. As an illustration of this, he has shown me the ordinary ramie fiber of commerce, the mature stalk, and the overmature stalk, with the product of each. He states that the reason that the immature stalks have hitherto been used is because the bark and wood could be removed in this state by hand, and with the mature stalk it could not. He has overcome this difficulty by the invention of machinery that will remove all the bark and waste from the plant in its mature state and leave a staple from 1 to 3 or 4 feet long and in perfect condition. By the new process, the plant can be produced and turned into yarn ready for commerce and used for all the purposes of flax and hemp at a cost much less than either of those articles. Rhea can be readily grown in nearly all of the Southern States.

I have also seen woolen cloth of a very respectable character in which the ramie was mixed, and its presence could not be detected save by the closest examination.

His invention and his judgment on the matter have the written indorsement of Stanton Hill, the noted London expert on these fibers.

I have gleaned the appended facts from Mr. Raabe, and I have every reason to believe them trustworthy.

The rhea plant (*Urtica*, or *Bahmeria nivea*, or *tenacissima*), also known under the names of ramie, rhea fiber, China grass, Karso, Chinese Tschu-ma, is a plant very much like the European nettle, indigenous chiefly to the tropical countries of both hemispheres, and contains a very fine and most tenacious fiber, but is not covered with stingy down. The root of the plant, which is perennial, sends forth shoots from 4 to 6 feet in length, three to four times per year, according to soil and climate.

Bahmeria nivea is chiefly cultivated in India and China and is covered with a very fine fiber, which is exported under the name of China grass, and has created a great interest for a considerable number of years.

Bahmeria tenacissima, in all probability another species of the above plant, and only distinguishable therefrom by the back of the leaves being less downy, is chiefly indigenous to the Indies, but is also cultivated as a most valuable textile plant in southern Asia, on the Sunda Islands, Malaccas, Mari-

ana Islands, and in China and Japan, and yields a fiber originally known under the name of rhea.

Extensive cultivation experiments have also been made with both plants in Mexico, Brazil, Australia, North America,* North Africa, the Cape, and in some parts of Europe.

The stalks of both plants attain a height of upwards of 6 feet, but are less woody in *Bahmeria nivea* than in *Bahmeria tenacissima*. The fibers grow between the bark and the wood, and are joined thereto and to each other by very sticky and glutinous matter.

The method at present in use for extracting the fibers from these plants is as follows :

The stalks are cut about $1\frac{1}{2}$ inches above the root, stripped from the leaves and placed in water, after which the fibers are taken therefrom by means of a knife, boiled repeatedly, bleached in the sun and separated from each other by hand, and treated with lime and ashes.

Rhea fiber is at least equal to, if not greater in strength, than the best hemp, and the firmness of the fiber is equal to that of the best flax ; therefore, most magnificent fabrics, which are in very great demand, are produced therefrom in eastern Asia, but are very little exported on account of the excessive price.

The rhea plant grows wild in the above countries, but it must be properly cultivated for textile purposes, for which it is necessary that the stalks should be of uniform growth and ripeness. This, however, can not be the case when gathered in the wild state.

The rhea fiber is said to have been originally imported to Europe from India in the year 1820, and was first utilized in Leeds for rope making.

Since 1851, the fiber has attained a much greater importance, and has been imported from the Indies, China, Japan, Java, and the Sunda Islands and spun into the finest counts of flax yarns, even up to No. 250.

In order to create a greater interest in the cultivation of the rhea plant, the Indian Government offered, in the year 1868, a reward of £5,000 for a machine which would be capable of producing from this plant a fiber suitable for spinning, but neither machine nor process has been invented up to the present day answering the conditions laid down by the award. Furthermore, the rhea industry has not been in any way developed hitherto, although many machines have been invented and tried, but have failed. Taking into consideration, also, that every system known up to the present moment is based upon one and the same principle throughout and has failed, it is evident that a different method of decorticating this plant should be adopted, and that the method of treating other similar fibrous plants as flax, hemp, etc., would be the only suitable plan to insure success.

To arrive at the proper solution of the rhea problem, it is first necessary to carefully examine into the structure and characteristics of the plant. It

* For history of experiments in the United States, see Report No. 1, Fiber Investigations of Department of Agriculture, 1892.

will then be seen that the stalk is composed of a wooden tube, having a pithy core, and being surrounded by fibers which are covered with bark, the tube, fiber, and bark are joined together by means of a glutinous matter or gum.

In comparing this textile plant with the raw materials now used in the four principal branches of the textile industry, namely, silk, animal fibers, cotton or seed fibers, and stalk fibers (flax, hemp, etc.), it will be seen that it corresponds, as far as structure and growth are concerned, exactly with flax and hemp, and that its fiber possesses the same characteristics as those of flax and hemp. The only difference which exists between these stalk-fiber plants consists in the different nature of the tube of the stalks and in the fineness of the fiber, which, however, in no way affects the principle of the structure of the plant.

In flax, a tube of a strawy nature is combined with a fine fiber, and in hemp a tube of a woody nature is combined with a coarse fiber, whereas in rhea a tube of a woody nature is combined with a fine fiber; this combination constitutes, therefore, a new departure in stalk-fiber plants and necessitates a new treatment, comprising that of both flax and hemp to effectually deal with this plant. Therefore, to produce from rhea a similar fiber to that of flax and hemp, it is necessary that the treatment of these textile plants should be followed as closely as possible.

In the first instance, special attention must be paid to the cultivation of the plant and its harvesting. As overripe fibers are harsh and brittle, and therefore not suitable for textile purposes, the plant must be cut when fully developed, but before forming seed and beginning to die. It is, therefore, advisable to extend the cutting of the plant over several days and to limit the daily cuttings to the properly matured stalks only, thus insuring a uniform quality of the stalks and fiber.

As rhea contains a considerable amount of gum, which greatly interferes with the drying and storage of the stalks and renders the fiber, when dried, stiff and brittle, it is necessary to subject the stalks, after being cut, to an ordinary steeping or retting process, which partly removes the gum, softens the fiber, prevents fermentation, and, at the same time, facilitates the decortication. The retting of flax and hemp in Europe is very slow and requires ordinarily from four to six weeks, whereas this process can be carried out in tropical countries in as many days, according to climate and the chemical composition of the soil.

The decortication of the stalks, which should be carried out between the various crops, takes place in a similar manner to that of flax and hemp, but instead of by manual labor (as now adapted for the decortication of stalk-fiber plants) by means of a special machine, constructed on the principle of hand labor, and for use in the fields where the plant grows, in order to effectually deal with the large quantities of stalks which the various crops per annum must naturally yield, and to reduce as much as possible the expenses connected with the decortication and so to minimize the cost price of the fiber.

This machine consists of two sections, the first being composed of four pairs of rollers, of which the first pair is plain and the other three pairs are composed of discs upon which iron bars are fixed at certain distances, the distances between the iron bars diminishing on each pair of rollers. The object of the first section is to gradually break the woody portion of the stalk and to separate the same from the fiber; that of the second section to gradually break and remove the bark of the ribbons produced by the first section and to divide, soften, and finish the fiber.

The machine is constructed to treat a certain number of stalks at the same time and to produce the fiber therefrom in its full length, perfectly straight, and without in any way injuring the same. It can be easily manipulated, and does not require much motive power or personal skill, and is therefore thoroughly adapted to the local conditions peculiar to the countries where the plant grows.

Decortication takes place when the stalks are in a dry state, and the production of one set of the machinery affords the following result with unretted stalks and Algerian wages: Two hundred and twenty-five stalks were decorticated in two minutes and twenty seconds, 97 stalks in one minute, 5,820 stalks in one hour, and 55,290 stalks in one day (nine and one-half hours). Two hundred and twenty-five stalks, weighing 6 pounds, yielded $1\frac{5}{8}$ pounds of finished fiber, 5,820 stalks, weighing 168 pounds, yielded $42\frac{1}{8}$ pounds, and 55,290 stalks, weighing 1,597 pounds, yielded $399\frac{1}{8}$ pounds. One set of machinery, consisting of three sections, requires four men at 60 cents per day (\$2.40), and four boys at 25 cents per day (\$1). Wages per $399\frac{1}{8}$ pounds of fiber—the production of one day of nine and one-half hours, or, say, one-sixth of a ton—are \$3.40; one ton of finished fiber requires, consequently, labor cost of \$20.40. The price in Algeria of one ton of stalks (dry) is \$19.46, yielding, say, 25 per cent of fiber, consequently there is required for one ton of fiber four tons of stalks.

4 tons of stalks, at \$19.46 per ton..... \$77.84
Cost of retting :

(Six laborers for filling and emptying the tanks and drying 1,000 kilograms,
1 ton, of stalks per day at the rate of 3 francs, 60 cents, per day.)

24 laborers at 60 cents per day for 4 tons of stalks..... 14.40

Cost of decortication..... 20.40

Power, carriage, incidentals, etc..... 8.76

Cost price of 1 ton of finished fiber..... 121.40

To remove from the fiber ribbons produced by the first section of the machine any wooden particles which may still adhere to the same, and to still further free the fiber obtained by the second section from any particles of bark and other impurities, and also to straighten both the ribbons and the fiber, it is advisable to pass them to a kind of swingling machine, which consists of two fly rollers, having long and blunt blades, fixed on revolving shafts at a certain distance from one another. These fly rollers revolve in an opposite and downward direction, and are geared so that the blades of one

roller always intersect those of the other roller, and that the fiber material can be readily introduced into and withdrawn from the machine. This machine, which is constructed to effectively beat and shake the fibrous material in one direction, delivers the same not only entirely free from all adhering impurities, but also perfectly straight, soft, and open.

The fiber produced by this machine is similar in appearance to flax and hemp, and permits of being spun into yarn similar to flax and hemp yarns on the machinery at present in use for spinning stalk fibers. When used as a new raw material for the flax and hemp industries, it will find a ready and large market, which is in harmony with the large production of the stalks.

Considering that rhea is perennial and therefore does not require resowing or replanting, that it can be cultivated on very cheap land, yields from three to four crops per annum in a tropical climate and can be decorticated by machine labor at very little expense, it is obvious that the fiber produced therefrom can be brought into the market at a very much lower price than any similar stalk fiber and will thus be able to not only successfully compete with these stalk fibers, but, on account of its fineness, great strength, and superior properties, will become a formidable rival to flax and hemp of a superior description.

As the fabrics manufactured from stock fibers require a smooth thread, the best method of spinning these fibers, and also rhea, is the wet-spinning process. By the action of the hot water used in this process the gum not extracted in the retting process is dissolved, and by the subsequent drying a perfect union and smoothness of the thread are obtained.

It has been frequently suggested that the rhea fiber should become a substitute for silk, and certain chemical processes have been invented to produce from rhea ribbons a fiber similar in appearance to silk, but when this fiber was used in the manufacture of such goods it soon became apparent that it was not suitable for the silk trade, as the fabrics produced therefrom had a tendency to crease, and consequently were unsalable. It has likewise been attempted to introduce rhea into the woolen industry, but as for this purpose only short fibers are required, it would be necessary to break up the rhea fiber into short lengths in order to be able to use it for woolen purposes and to spin it in combination with animal fibers on wool machinery. Moreover, in this case, rhea can only take the place of a substitute for other similar raw materials now used in the manufacture of woolen goods, and must therefore be considerably cheaper than these raw materials, so as to afford manufacturers the necessary inducement to utilize it in their fabrics.

The cheapest vegetable raw materials of a superior description now used in the woolen manufacture are cotton waste, the average price of which is about 8 cents per pound, and flax noils, which can be purchased in almost unlimited quantities at from \$29.20 to \$72.99 per ton, and the price obtainable for rhea fiber in the woolen trade would therefore not exceed \$38.95 per ton, at which price, however, it is quite impossible to produce it. Stalk

fibers being also much harsher, heavier, and different in nature, cotton is a far more suitable and advantageous raw material for the woolen industry.

Cotton is a single-seed fiber of short and uniform staple, and as rhea is a stalk fiber and a combination of fiber of different and much greater length than cotton, it has not been considered possible to make rhea compete with cotton.

It is therefore obvious that, as rhea fiber is similar in structure and nature to flax and hemp, it should be used as a substitute for these fibers and be produced similar in appearance to them.

In carefully considering the process hitherto invented for breaking rhea and similar fibrous plants, it will be seen that they are based upon one and the same principle throughout. If this had been the right principle rhea would have become an industry long ago, as in this case it would have been only a question of ascertaining the most effective and advantageous process based upon such principle. This, however, is not the case, as most of the processes now in use are limited to the treatment and improvement of the raw fiber (ribbons), but are ineffective for the decortication of the plant; neither do they take the utilization of the fiber into consideration.

In dealing, first of all, with the chemical processes, it can be easily understood by anybody, even without the slightest knowledge of textile matters, that these processes can only be applied to fibers, but in no way be used for the production of fibers from stalks, as they are only calculated to extract the glutinous matter in which the fibers are imbedded and by which they are joined to the pith and bark. They are totally ineffective to free the fiber from the wood and bark and to render it soft and open, for which purposes only a mechanical treatment can be employed. All chemical and wet processes must naturally produce a hard and more or less entangled fiber, and consequently considerably affect the yield of long fibers and increase the waste in the spinning process, not to mention the injury which is done to the fiber by the action of the chemicals used. Moreover, it would be impossible to produce from such fibers a yarn suitable for the flax industry, the machinery at present in use not being suitable and the price of the fiber being too high to compete with similar raw materials now in the market.

As far as the mechanical processes are concerned, they are chiefly calculated to deal with the stalks, and produce therefrom the fiber in the form of ribbons or in a similar imperfect state, so that they require an additional process of treatment before they can be utilized for any textile purposes. These processes are mostly impracticable in dealing with large quantities of stalks, especially in countries where climatic difficulties have to be contended with, as they are not applicable to fully matured and dry stalks, but only act upon fresh and partially developed plants.

The principal difficulties to be overcome in the development of the rhea industry are the production of a marketable fiber from this plant, free from all adhering impurities, but at the same time soft, open, and sufficiently divided and admitting of being treated on the machinery at present in use

and adaptable to the purposes for which stalk fibers are now employed in the textile industry and at a moderate price, to effectually deal with large quantities of stalks in the countries to which the plant is indigenous, and to find employment for the fiber obtained therefrom in proportion to the production of the stalks.

To attain this object, the treatment of flax and hemp and the employment of the fibers of these plants must therefore form the basis for the utilization of the rhea plant. The retting process and the subsequent mechanical treatment permit of effectually dealing with large quantities of properly matured stalks at very little expense and of producing therefrom a clear, soft, open, and sufficiently divided fiber, in no way entangled, which admits of being spun on ordinary flax and hemp machinery and entails no greater loss in the spinning process than any other similar stalk fiber. Moreover, the flax and hemp industries offer to the rhea fiber, on account of its superior properties and great cheapness, a ready opening for its employment on a very large scale, and which is quite in proportion to the large production of the stalks.

The ribbons or raw fibers of rhea now in the market are stripped from the stalks either by hand or extracted by mechanical means, and as they are imperfect and not in a ready state for spinning, this necessitates a further treatment for transformation into filasse. This evidently led to the adoption of the chemical treatment for the improvement of these ribbons, and to the idea that the rhea fiber should be employed for any other purposes except those for which it is intended by nature, namely, for the same purposes as flax and hemp and similar stalk fibers.

As by the new process of decortication a perfect raw fiber is produced, which, without further treatment, can be used for spinning purposes, there is no longer any need for a subsequent chemical treatment; but should this, nevertheless, be desired, it is obvious that the same can be carried out under much more favorable conditions and will yield far superior results than was possible with the hitherto imperfect ribbons. Moreover, by enabling the cultivators of rhea to produce from their stalks a perfect raw fiber, the principal obstacle to the development of the rhea industry has been successfully removed, and by substituting this perfect raw fiber for the imperfect ribbons now brought into the market, the way has been paved for the more successful treatment and employment of the rhea fiber.

It has likewise been suggested that, for the utilization of the rhea fiber, it is essential to extract the glutinous matter in which it is imbedded. This theory is totally erroneous, as by carefully examining the fiber it will be seen that the filasse is a combination of various fibers, which are joined together by means of this glutinous substance. The spinning process being a combination of various fibers into a thread, it would be absurd to completely divide the fibers and thus destroy their natural combination for the purpose of recombining them afterwards in a more imperfect manner. It is simply required to split the fibers to such an extent as is requisite for the fineness of

the yarn to be produced, and this can only be done by hackling or combing the fibers in the well-known manner for spinning stalk fibers. Moreover, for the production from rhea of a thread which is intended for flax and hemp purposes, a certain percentage of gum must necessarily be left in the fiber.

As the process above referred to is based upon the principle of the old and well-known treatment for decorticating stalk-fiber plants, it is not only suitable for rhea, but also for the decortication of hemp and other similar fibrous plants. By introducing certain modifications into the machinery for decorticating fibrous plants having a woody core, like hemp, rhea, etc., it can also be adapted for the treatment of fibrous plants having a strawy core, like flax, etc., and will therefore be of the greatest importance for the flax industry, as it enables the decortication of this plant in a cheaper and much more expeditious manner than is possible by the present slow and tedious hand manipulations.

The new process of decortication, which has been especially combined for dealing with textile plants having stalks with a woody core, has been properly protected against competition in the principal industrial countries, and the new industry has been brought to such a stage of perfection that it can be worked in the countries where the plant grows upon a commercial basis without further experiment.

In order to insure the supply of rhea stalks, the Indian and Dutch governments have consented to allot to the patentee of the new machinery suitable land for the cultivation of the plant under most favorable conditions, and, moreover, an established and ready plantation, together with the assistance of an experienced cultivator of the rhea plant, who has been secured in Algeria, and operations can be commenced forthwith.

It has been frequently stated that the failures of rhea schemes and the small development of this industry are due to the scarcity of the raw material. Such arguments, however, clearly demonstrate how little rhea and its use are understood.

It is a well-known fact that the successful introduction of every new raw material is only a question of demand for the same, and that the demand naturally depends upon its employment, which is again dependent upon its nature, the very foundation for its production and manipulation.

As, therefore, by the new process and method, a proper and very extensive market can be established for the rhea fiber and a suitable raw fiber may be produced for this market, the necessary inducement can be offered to the cultivator for the raising of the plant upon an extensive basis.

In comparing the present rhea fiber as imported into European markets with those of other kindred plants, as flax, hemp, jute, etc., it will be found that this fiber is produced in a totally different state and condition to the latter, and therefore requires the additional treatment for transformation into filasse, which has been hitherto considered the vital point in the rhea problem. However, as by this treatment the nature and character of the fiber

must evidently undergo a complete transformation, which prevents its manipulation upon the ordinary machinery at present in use for spinning vegetable fibers, and the cost price of the fiber is increased in a manner that will prevent it from successfully competing with the fibers now in the market, it follows that instead of solving the problem of rhea by the present treatments, additional obstacles are thrown in the way which render the solution of the rhea problem still further distant.

It is, therefore, quite incomprehensible why the manipulations with rhea should be limited to the improvement of the present rhea ribbons or imperfect raw fiber, and why no attempt has ever been made to import, in place of these imperfect raw ribbons, a marketable raw fiber, similar to those of flax and hemp, jute, etc., which can be treated upon the machinery at present in use and employed for well-known purposes, as a cheaper and more advantageous substitute.

This being the object of the new system, method, and process, it has been found that the way has been successfully paved for rhea to compete with and become a formidable rival to flax and the higher grades of hemp in a similar manner to that which made jute an important competitor to the lower qualities of hemp.

It will be remembered that in former times the principal stalk fibers used in the textile industry were flax for superior purposes and hemp for inferior purposes, and it is well known that these fibers possess excellent properties and characteristics, which make them applicable for purposes of a great variety. However, as for some of these purposes, properties and characteristics are of less importance than price, jute, although much inferior, has in many instances taken the place of hemp, owing to its greater cheapness and the advantages resulting therefrom. Flax, however, has so far retained its exclusive position among the finer fibers, owing to the fact that no fiber has yet been brought into the market that could successfully compete therewith as regards fineness, characteristics, and cheapness. Such successful competition rhea admirers believe is now created by the new method and treatment of rhea, and, they allege, it is therefore obvious that the success of this fiber, as a substitute for flax and the higher grades of hemp, will far outweigh that attained by the jute fiber, and that this new industry will become a leading feature of the future.

CLAUDE MEEKER,
Consul.

BRADFORD, *August 23, 1895.*

RAMIE YARNS AND CLOTHS.

Within the past two months I have observed that a number of the textile factories in this immediate vicinity have been weaving ramie yarns into cloth. Upon inquiry, I learn that the firm of James Linlay & Co., Castlefield Mills, Derby, England, who have a mill devoted to the spinning of ramie yarns,

sent their representative to Belfast to place before the manufacturers the availability and value of ramie for mixing with linen, claiming for the union as good a cloth, equally marketable, and at a cheaper price, the saving being estimated at from 12 to 15 per cent.

Several attempts have been made in past years on the part of the weavers to utilize ramie, but with such poor success that it was abandoned. Within the past year there has been a renewal of the agitation of the advantages of ramie yarn mixed with flax yarns. The reason given is that the new processes of decorticating and degumming the ramie fiber are upon a scientific and successful basis, resulting from accurate knowledge of the plant's chemical properties. The textile manufacturers hereabouts are skeptical on the subject and reluctant to make further outlays on experimental trials. Yet, rather than lose a possible opportunity of enlarging and improving trade, some of the mills are giving the new method of preparing ramie yarns a trial. One large linen mill has bought \$500 worth of yarns for experimental purposes, other mills have bought smaller quantities, and all are actively experimenting on the coarser lines of goods to ascertain how the union cloth compares with the article it is intended to replace. Trial lots in some instances have been placed in the hands of buyers, and weavers are now waiting for reports.

I inclose samples* as follows: (1) "Rove of second sliver;" (2) one pirn of fine yarn spun from same quality; (3) one pirn of coarse yarn; (4) one piece of dowlas made from ramie yarn; (5) two pieces of check cloth made from ramie yarn; (6) two pieces of check cloth, warp of silk, weft of ramie, grassed and polished.

The dowlas is supposed to be manufactured out of the same grade of ramie yarns as would correspond to a cloth made from flax-tow yarn.

The all-ramie check cloth has been placed on the market, and some inquiries are being made by buyers. The cloth is said to take dyes of all colors admirably, and looks and feels well.

The two pieces of check cloth, marked "No. 6," are reputed to be in demand for neckwear. It is claimed that the ramie weft works well with the silk warp, and takes a fine finish.

So far, the white cloth made from linen and ramie yarns is not up to expectations, although great hope is expressed in some quarters that it soon will be. One objection advanced is that, in the bleaching which occurs in conjunction with the decorticating process, all the coloring matter is not removed; this defect is considered of minor importance, as it is thought there will be no trouble in remedying it. Another objection, and a serious one, is that the finer yarn has a hair or fuzz upon it which the teeth of the reed, being so close together, shave, causing the hair to accumulate and ultimately break the yarn. In the coarser yarns, this does not occur to such an extent, and it is said it works with quite as much facility as the flax yarn in the weaving of linen. However, this difficulty, it is hoped, will be shortly

* Filed in Bureau of Statistics, Department of State.

removed by spinning the yarn wet, as such process, it is believed, will completely lay the hair. It is claimed that, in its present condition, it is well adapted as a warp for a union with silk or linen.

I am indebted to the courtesy of Messrs. Richard Bell & Co. and Henry Kirk & Co. for much of the information herein contained.

JAMES B. TANEY,
Consul.

BELFAST, *May 8, 1895.*

STATE AID TO INDUSTRIAL SCHOOLS IN FRANCE.*

The following table shows the amount of subventions allowed to institutions of industrial and commercial instruction in France during the fiscal years 1894 and 1895:

Instruction.	Budgets of the schools.	Subventions.				
		Of the departments.	Of the communes.	Of the chambers of commerce and miscellaneous associations.	Ordinary.	Extraordinary.
	<i>Francs.*</i>	<i>Francs.*</i>	<i>Francs.*</i>	<i>Francs.*</i>	<i>Francs.*</i>	<i>Francs.*</i>
Industrial instruction, fixed allowances.....	1,213,841.33	53,000.00	186,358.00	92,741.00	{ 163,700.00 21,800.00 }	{ 2,000.00 }
Commercial instruction, fixed allowances.....	598,810.00	12,900.00	46,966.00	60,685.90	{ 59,300.00 10,300.00 }	{ 7,000.00 }
Syndical instruction†.....	118,302.72	500.00	30,200.00	1,100.00	21,450.00	.....
Total.....	1,930,954.05	66,400.00	263,524.00	154,526.90	276,550.00	9,000.00

* 1 franc=19.3 cents.

† The term "syndical instruction" is used to indicate instruction of a purely industrial character, given under the auspices of various voluntary associations of employers or workmen who are granted certain allowances by the general and local governments.

The following shows the number and classification of industrial schools maintained and conducted directly by the State or subventioned or recognized by it for the year 1893. The schools are classified as follows:

Class.	Number.	Number of pupils.
National schools.....	9	9,022
Practical schools of commerce and industry.....	20	3,191
Miscellaneous.....	86	36,217
Total.....	115	48,430

* Figures for Great Britain were printed in CONSULAR REPORTS No. 177 (June, 1895), p. 372.

Receipts.

Subventions.	National schools.	Practical schools.	Miscellaneous schools.	Total.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
From the State.....	2,244,269.99	340,340.25	220,600.00	2,805,210.24
From the departments.....	1,000.00	20,190.00	58,950.00	80,140.00
From the communes.....	15,700.00	405,994.00	286,363.75	708,063.75
From the chambers of commerce.....			46,774.55	46,774.55
From various associations and private citizens..			257,374.40	257,374.40
Tuition of pupils.....	579,000.00		349,527.50	928,527.50
Miscellaneous receipts.....	69,000.00		240,133.25	309,133.25
Total.....	2,908,969.99	766,524.25	1,459,735.45	5,135,229.69

Expenses.

	<i>Francs.</i>
National schools.....	2,908,969.99
Practical schools.....	766,524.25
Miscellaneous schools.....	1,510,474.27
Total.....	5,185,968.51

SAMUEL E. MORSS,
Consul-General.

PARIS, August 19, 1895.

AMERICAN SHIPPING FOR ASIATIC PORTS.

The Pacific coast line of Asia provides numerous illustrations of business for which steamers flying the United States flag could compete with the hope of fair reward if our shipping interests ever experience that revival for which all Americans are longing.

The Siamese shipping returns show that during the year 1894, 516 vessels entered the port of Bangkok, but not one of these was American. Of these 516, over 70 per cent, or 371, were British, while the remainder consisted of 62 German, 55 Norwegian and Swedish, 10 Italian, 9 Dutch, 6 French, 2 Siamese, and 1 Danish. Of 516 vessels, 476 were steamers and 40 were sailing ships. Of the former, 405 came with cargo and 71 in ballast; of the latter, 33 were with cargo and 7 in ballast. Sailing ships were mostly in ballast, because they were generally sent here to carry teak to Europe, and incoming cargoes seldom come otherwise than in steamers.

That this trade is worthy of the effort made by British companies to control it, is shown by the fact that the total value of cargoes imported in the 412 laden vessels was \$17,083,456, or an average of \$41,464 to each vessel; and of this total of \$17,083,456, British bottoms carried \$14,787,742, or, approximately, 80 per cent. The average value of cargo in steamers alone varied from \$47,242 in British bottoms to \$1,654 in French, while the Norwegian and Swedish averaged \$29,530; German, \$24,406; Dutch, \$16,405, and Italian, \$5,889.

The total tonnage was 414,583, or an average of about 800 tons for each vessel.

Taking into consideration the fact that Bangkok is not located on what may be termed the regular route of traffic between China and Europe, and that vessels only pass through its harbor to load or unload there, the record of shipping for one year is not bad, and shows that Bangkok is a port of considerable commercial importance. It is not an unusual thing to see in one day a dozen steamers in the Menam, which flows through Bangkok. The majority of them are cargo boats, but they have accommodations for passengers.

Bangkok is one of the many Oriental ports that would furnish cargoes for American vessels if our shipping interests ever regain the hold in this part of the world which they once possessed. There was a time when our vessels were seen in this harbor as frequently as those of any other nation, and it is to be regretted that the "good old times" have not been revived.

The French and Germans are striving to secure a larger share of the carrying trade, but the older British lines seem to be working with equal vigor to hold the field. Although the present monopoly may maintain its sway for some time to come, it does not stand to reason that it can retain the bulk of a rich business permanently against competition.

As has been urged and suggested in some of my preceding reports, there is an opportunity for the development of our commercial interests here and in other and greater Oriental ports, if the right methods are used and proper energy and persistency are displayed.

JOHN BARRETT,
Minister Resident and Consul-General.

BANGKOK, *July 8, 1895.*

THE SOUTH WALES TIN-PLATE TRADE.

The tin-plate trade of South Wales is emerging from a crisis which had reached an acute stage on the 1st day of this month, when twenty-eight days' notice to terminate contracts on the part of the men expired, and work was consequently suspended at nearly all of the mills. The demand made was for the restoration of what is known locally as the "1874 list" of wages.* For months past a great deal of anxiety has been experienced by both masters and men because of American competition, to which the fall in prices and the consequent reduction of wages and stoppage of a large number of mills were attributed. A board of control, comprising representatives of both the operators and the workmen, was formed with a view to regulating the prices of tin-plates, but on a falling market this step, for want of unanimity, was not a complete success. The operatives claimed that it was ridiculous to impoverish everybody interested in the trade "to make a

* Printed in CONSULAR REPORTS No. 176 (May, 1895), p. 96.

present of thousands of pounds to Americans on plates that they can not make themselves, but will continue to take from Wales." The board checked production to some extent, and, as a result, the prices of plates stiffened, but it was felt generally that something more than an arbitrary interference with the make was needed, and attempts were accordingly made to form a wages board. But to this the operatives were not inclined to agree, although it was urged by the men that wage reductions had proved to be no solution of the difficulties, for, according to their computations, the low prices put into the pockets of American consumers no less than \$45,000 per month.

Conventions were held, and finally the following resolutions were adopted:

That this council hereby expresses its hearty approval of the manifesto issued by the executive of the union, and agree that the best interests of the employers and employees of the tin-plate trade demand that an end be brought to the gambling in wages now going on; that a uniform rate of wages be reestablished, and that the 1874 list be given to the tin-plate workers, in which a living wage is provided; that this council determines as a means to secure the reestablishment of the 1874 list to instruct all tin-platers to refuse working after June 30, except at rates of wages generally known as the 1874 list.

Scarcely any friction appears to have resulted from this, and I have a notion that the labor cause is not by any means suffering from the fact that the general election is now taking place. Anyway, the greater part of the mills are running on the terms demanded, and the wages of the operatives are thereby improved from 10 to 22½ per cent, greater reductions having previously been effected in certain works than in others. It is expected that all the operators will soon have conceded the "1874 list," and thus uniformity will be secured; but it remains to be seen how long that will last, and how far success will attend the efforts to regulate the price of the wage standard. Suffice it to say that, as there are undoubtedly more than enough mills on hand and that there is every probability of work in the finishing departments being simplified considerably in the future, there is room to fear that, with regard to the wage question, "the end is not yet."

The lesson has evidently been taken deeply to heart that it was worse than useless to attempt to prevent American competition, and whatever effect the restoration of the 1874 list may have upon the demand for plates, it must necessarily produce an improvement of prices; and in the interests of the immense number of operatives who have at times been brought to the verge of starvation by the badness of trade lately, it is hoped that the "list" will, as of yore, remain in operation for many years.

The British representative of a leading American firm of iron manufacturers desirous of "bringing coals to Cardiff," so to speak, by way of putting American iron on the South Wales market destined for the tin-plate trade, wrote me recently asking for details as to the mode of manufacture of what are termed "tin bars" in this district, and as the particulars obtained will doubtless be valuable to our iron firms generally, I deem it my duty to

submit the same. I have previously intimated that a few only of the tin-plate firms make their own "tin bar," which, I may explain, means the iron bar from which the tin plate or sheet iron is rolled, most of the bar iron being purchased from iron and steel makers. The greater part of the supply throughout South Wales is obtained from the Dowlais and Cyfarthfa works, respectively (perhaps the oldest in the world), situated in Merthy Tydvil, about 25 miles from Cardiff. It is curious to note that at the Dowlais works, a dozen years since, tin-plate making was tried, but the experiment failed, owing, I suppose, to local causes. The orders booked at the places named vary in amount between 800 and 1,500 tons, each order comprising lots of 100 tons, which are themselves subdivided. To illustrate this, I here give an exact copy of an actual specification :

Ten tons of tin bar, 16 pounds 4 ounces per foot.

Twenty tons of tin bar, 8 pounds 4 ounces per foot.

Twenty tons of tin bar, 12 pounds 8 ounces per foot.

Fifty tons of tin bar, 18 pounds per foot.

This may be taken as being approximate to the average specification, and therefore affords a correct idea of the weight per foot of the bars called for by the tin-plate manufacturers. I am informed that the heaviest ever used was 33 pounds per foot, but that was evidently in the nature of an experiment, as the usual sizes vary between 8 and 18 pounds per foot and from five-sixteenths of an inch full to three-fourths of an inch thick and 7 inches wide. It rarely happens that the bars have to be supplied to any specified length, but when such is the case, the figures given are 2 feet 6 inches, whereas the bars usually range between 8 and 14 feet, and are not sheared. No basic steel is used for the purpose in this district, the methods adopted being Bessemer and Siemens, respectively, and of these the proportion used is, roughly speaking, three to two, in the order named. There are no specified tests for tin bars, but tests are occasionally made by cutting pieces from a bar and bending them, both hot and cold, double, in order to ascertain that the steel is sufficiently soft for doubling purposes. The mechanical test imposes a tensile strain of 26.4 tons per square inch, with an elongation of 20 per cent in 10 inches. The chemical results usually show: Carbon, .11; sulphur, .07; silicon, traces; manganese, .4. I may mention that, at one of the works named, the sulphur shows no more than .04 to .06, and at these works the demand for bars is said to be always greater than the capacity of the mills. In the Bessemer department, the usual cast for tin bars appears to be about 12 tons, and about thirteen casts per twelve hours are made, the pressure of blast used in the converter being about 25 pounds per square inch. The size of the ingots is between 4 feet 6 inches and 5 feet in length, the thickness being 13 inches square at one end and tapering slightly to 12 inches square at the other end, and the weight varying between 17 cwt. 3 quarters (1,988 pounds) and 18 cwt. 2 quarters (2,072 pounds).

The charges put into the Siemens furnaces for the same purpose are somewhat as follows: Four furnaces each charged with about 5 tons of pig iron,

6½ tons of ingot ends, bar crop, rail crop, and steel scrap, and about 1¾ cwts. of ferro manganese; also, two furnaces having each about 15 tons of ingot, ends, etc., and 3½ cwts. of ferromanganese. The gas used in the Siemens furnaces is manufactured from the lowest grade of fine coal obtainable, which shows by analysis about 60 per cent of fixed carbon, 30 per cent of volatile matter, and 10 per cent of ash. The only difference in respect of size between the Siemens and the Bessemer ingots is that the former are about 3 inches longer than the latter.

The usual make of a tin-bar mill is 140 tons per twelve hours; the ordinary week's work, including six days and five nights, shows an aggregate of between 1,500 and 1,600 tons.

It should be observed that the figures given above as to the size of the ingot refer to mills where second heating is not resorted to, and that, ordinarily, the weight would vary between 10 and 13 cwts. (1,120 and 1,666 pounds) wherever reheating is the rule. It is in one works only that this is not the case, and there can be no question that the steel suffers on that account. If all went well, a saving of no less than 75 cents per ton would be shown on the cost of manufacture, but as the ingot is cut into two parts, one becomes cold during the time that the other is being reduced by being passed through the rolls, and, consequently, the colder one, when finished, has laminations on its surface, so that a deal of waste is inevitable. Although apparently more expensive, the ordinary process of second heating is, therefore, preferable, for after the ingot has been roughed down in the "cogging" mill to about 6 inches square in thickness and cut into two parts, these are put into coal furnaces near the rolls and are heated for about one hour before the rolling takes place.

The price current is believed to be at its lowest ebb, the latest figures which have come under my notice being £3 12s. 6d. (\$17.60) per ton. I may here mention that by an agreement between the operators and their men, the wages are determined by a sliding scale (as is the case with the miners throughout South Wales) every three months, but with the difference that, in the case of the iron workers, a minimum wage is fixed. Hence, when the recent quarterly audit took place, the wages were not reduced, because, although the selling price averaged \$18 per ton only, the wages were already at the minimum point. To say that the wage rate is low, generally, is to put it very mildly indeed, as there is an enormous difference in the average rate of wages at these tin-bar mills when compared, for instance, with what obtains at the tin-plate mills.

I append hereto figures taken from the British Board of Trade and Navigation Returns for the month and six months, respectively, ending June 30 last. It will be observed that the total exports for the half year just ended show some advance upon the corresponding period of last year, and that would have been more marked but for the falling off during the month of June, the obvious explanation of which is that sellers were holding in view of eventualities dependent upon the general demand for improved wages in July.

Exports of tin plates and sheets.

Tin plates and sheets exported to—	Month ending June 30—			Six months ending June 30—		
	1893.	1894.	1895.	1893.	1894.	1895.
Russia.....	£21,570	£13,251	£31,320	£187,669	£128,725	£180,046
Germany	5,365	3,599	4,396	24,705	24,364	30,477
Holland	9,089	4,098	3,233	33,565	34,789	29,965
France.....	9,408	7,781	10,541	65,639	69,212	109,800
Portugal, Azores, and Madeira.....	6,980	1,555	5,235	43,465	16,490	23,462
Italy.....	2,960	3,186	2,008	25,870	17,355	20,640
Roumania.....	10,216	5,633	4,842	29,509	52,300	16,022
United States.....	351,820	209,490	158,067	2,103,255	1,229,863	1,262,648
Brazil	6,145	5,983	3,366	36,783	23,572	24,638
Argentine Republic.....	2,032	4,295	2,163	20,055	21,195	8,388
British East Indies.....	6,370	6,074	10,178	36,446	42,235	67,008
Australasia.....	8,484	14,607	18,464	41,239	81,382	79,077
British North America.....	28,534	14,166	10,616	89,215	85,962	59,509
Other countries.....	27,913	22,788	23,853	129,389	185,012	175,612
Total	496,886	316,496	288,282	2,866,804	2,012,456	2,087,292

ANTHONY HOWELLS,

CARDIFF, *July 16, 1895.**Consul.*

THE FAIR OF NIJNI-NOVGOROD IN 1894.

Under date of February 16 (28), 1895, the Belgian consul-general at Moscow sent to his Government a report upon the business transacted at the fair of Nijni-Novgorod, Russia, in 1894. In view of the importance of the trade transacted at this fair, it seems well to transmit a synopsis of the report, which has only recently been published.

All weights, measures, and values are reduced to United States equivalents.

The value of the merchandise brought to the last fair of Nijni-Novgorod amounted to \$66,407,066, being an increase of about \$7,750,000 over the valuation of 1893. The sales amounted to \$56,732,748, exceeding the transactions of the previous year by \$2,824,000. Taking account of the orders for merchandise to be delivered at the next fair and of the banking operations (bank clearings during the fair amounted to \$120,020,000), the total value of trade at the fair in 1894 reached \$179,217,394.

Numerous cases of cholera having occurred in the city during the period of the fair's greatest activity, many merchants hastened to complete their business and others remained away, thus causing a certain confusion in commercial transactions, and, especially, in the sale of manufactured products. Several important traders of Siberia, fearing, by reason of the low water of the rivers of the transural region, that their merchandise would not arrive in time at the fairs of Asiatic Russia, made numerous purchases at Moscow before the opening of the Nijni-Novgorod market. On account of the unsatisfactory crops of the Caucasus, transactions with merchants of those provinces were less important than in preceding years.

The value of the principal articles brought to the fair and the amounts of their sales were as follows:

Articles.	Amount offered for sale.	Amount of sales.
Cotton	\$1,023,700.00	\$494,000.00
Wool, horsehair, and hogs' bristles.....	1,132,635.80	1,099,948.00
Undressed skins and leathers.....	1,423,234.23	1,320,652.43
Manufactured products :		
Cotton	20,121,000.00	18,511,320.00
Wool.....	3,081,690.00	2,397,752.50
Flax.....	1,846,587.13	1,394,085.25
Silk.....	529,500.00	280,635.00
Furs.....	4,428,385.00	2,949,315.00
Dressed leathers.....	2,118,000.00	1,830,305.00
Metals :		
Unworked.....	6,640,847.80	5,668,903.50
Wrought	1,304,335.00	1,067,825.00
Precious	882,500.00	344,175.00
Machines and instruments.....	353,000.00	230,156.00
Drugs and chemical and pharmaceutical products.....	1,129,600.00	1,023,700.00
Crystal ware, glassware, and ceramic products.....	744,830.00	531,265.00
Haberdashery.....	1,023,700.00	769,540.00
Paper, office supplies, and rags.....	524,205.00	471,255.00
Tobacco	1,585,446.55	1,567,796.05
Fish	1,526,725.00	1,526,725.00
Cereals.....	641,074.20	430,307.00
Sugars and other groceries.....	1,669,866.50	1,458,066.50
Liquors.....	797,780.00	727,180.00
Wood and cooperage articles.....	377,710.00	306,365.00
Trunks, furniture, and wagons.....	351,764.50	291,754.50
Packing paper.....	523,228.20	517,851.00
Soap, candles, and perfumery.....	381,628.30	362,036.80
Products of naphtha.....	545,843.90	400,054.90
Books, holy images, etc.....	151,790.00	103,782.00
Manufactured clothing.....	741,300.00	564,800.00
Chinese goods.....	7,554,200.00	7,060,000.00
Persian goods.....	592,334.00	539,384.00

The cotton trade of the last year was not satisfactory. Since the opening of the Vladi-Caucasian Railway to Petrovsk, a Caspian Sea port, the manufacturers of Poland and central Russia purchase Asiatic cotton directly at the place of production ; this fact explains the small importance of this trade at Nijni-Novgorod. The cotton trade at the last fair can be thus summarized :

Description.	Quantity.	Value.
	<i>Bales.</i>	
Brought for sale.....	48,400	\$1,023,700
Sold	22,500	494,200

The prices varied as follows, per 100 pounds:

Persian cotton	\$5.86 to \$6.11
Kokhand cotton (American seed):	
First quality.....	8.31 to 8.41
Second quality.....	7.53 to 7.57
Bokhara cotton.....	6.94 to 6.99
Khiva cotton.....	7.23 to 7.43

The trade in flax, hemp, tow, and other textile materials at this fair was relatively unimportant.

Description.	Quantity offered for sale.	Price per 100 pounds.	Amount of sales.
	<i>Pounds.</i>		
Hemp.....	613,904	\$2.69 to \$3.08	\$17,826.50
Flax.....	458,623	3.56 to 6.16	21,180.00
Harl.....	1,733,376	1.96 to 4.65	50,832.00
Tow.....	108,336	.93 to 2.05	1,588.00

The bad harvests of recent years compelled landlords to reduce the number of cattle raised. As a result of the rise in the prices of cow hair on domestic markets, this article is no longer imported, except in small quantities, and is chiefly purchased by the felt manufacturers. Cow hair is sent to the fair from most of the provinces of the Russian Empire, and from the most distant localities, such as Tashkend and Minousinsk, in the government of Yeniseisk, western Siberia. The amount of cow hair brought to Nijni-Novgorod was estimated at 3,972,320 pounds. This quantity was sold at \$5.37 to \$8.31 per 100 pounds for the total of \$266,938.60. Camels' hair, amounting to 2,527,840 pounds, was sold for \$6.28 to \$6.63 per 100 pounds.

The wool brought to the fair included the following quantities:

Description.	Quantity.	Sale price per 100 pounds.	Value.
	<i>Pounds.</i>		
Russian washed wool.....	1,444,480	\$8.79 to \$9.56	\$132,728.00
Bokhara wool.....	1,805,600	5.47 to 5.67	99,722.50
Wool from the transcasian region.....	1,083,360	2.74 to 4.16	37,241.50
Wool from the Kirghiz steppes.....	1,263,920	4.89 to 6.84	64,952.00

There were brought to the fair 1,227,808 pounds of horsehair, at \$8.80 to \$21.50 per 100 pounds, for the sum of \$205,446.

Pigs' bristles, amounting to 108,336 pounds, valued at \$58.65 to \$68.40 per 100 pounds, or a total of \$68,835, were likewise offered for sale.

The total of various merchandise of this description placed on sale amounted to \$1,132,635.80. The sales figured up \$1,099,948.

The undressed hides and leathers offered may be classified as follows:

Description.	Number of skins.	Sale price.	Total value.
Cow and ox hides.....	248,000	*\$7.92 to \$12.22	\$437,720.00
Horsehides.....	140,000	†1.52 to 1.80	232,274.00
Kirghiz sheepskins.....	1,000,000	†.17½ to .32	247,100.00
Russian sheepskins.....	600,000	†.32 to .35	191,149.50
Goatskins.....	217,000	†.32 to .37	74,685.98
Calfskins.....	600,000	*9.78 to 15.64	155,143.50
Camel skins.....	25,000	*4.89 to 6.35	50,743.75

* Per 100 pounds.

† Per skin.

As a result of the opening of a portion of the main line of the Siberian Railway, the number of skins brought to the fair greatly increased. The total of the sales of undressed skins and leathers amounted to \$1,321,687.73.

The trade in manufactured cotton articles was generally satisfactory. Textiles, colored Adrianople red, threads, and fustians were the object of many transactions. The cotton threads and textiles offered for sale represented a value of \$20,121,000. The sale of these goods brought \$18,511,320. Prices varied as follows: Small thread ($\frac{8}{18}$), from \$24.44 to \$26.88 per 100 pounds; twisted thread ($\frac{4}{8}$), from \$29.84 to \$31.28 per 100 pounds; unbleached cotton cloths, 28 inches wide, $4\frac{1}{2}$ to 5 cents per yard; fustian, $7\frac{1}{2}$ cents per yard; calico, 6 to 7 cents per yard; ticking, $9\frac{1}{2}$ to 11 cents per yard; madapolam (stout calico), $7\frac{1}{2}$ to $8\frac{1}{2}$ cents per yard.

The value of fine cloths, light woolen goods, and flannels amounted to \$1,765,000. The prices of Polish manufacturers were about one-third less than those of Moscow. The sales of these goods reached \$1,293,745. The trade in cloths of ordinary quality, which were offered to the value of \$811,900, was not flourishing; manufacturers were obliged, in order to find purchasers for their stock, to sell at a discount of 15 per cent on the prices asked at the opening of the fair.

The sales of felt shoes and of felt exceeded \$353,000. The prices were: Red felt, from 7 to 24 cents per piece; black felt, from 24 to 71 cents per piece; and white felt, from 48 cents to \$1.41 per piece.

The total trade in linen and hemp manufactures may be subdivided as follows:

Description.	Value of goods offered for sale.	Amount of sales.
Bags and bagging cloths.....	\$293,837.20	\$170,110.70
Awnings	88,250.00	70,600.00
Unbleached cloth:		
Pure linen.....	246,217.50	220,448.50
Mixed	120,726.00	62,481.00
Miscellaneous cloth.....	516,086.00	450,781.00
Flax threads.....	242,915.88	220,095.50
Cables, rope, and cordage.....	348,534.55	199,568.55

Silk goods to the value of \$529,500 had been sent to the fair by Muscovite manufacturers. The sales amounted to \$270,635.

The fur trade was less animated than at the preceding fair.

The lambskins brought were valued at \$142,000; only one-third was sold, and that at the rate of \$16.94 to \$18.21 per dozen. Bokhara rabbit skins were purchased at \$14.40 to \$16.94 per dozen. The number of skins coming from Persia was estimated to have been 250,000. Squirrel skins and tails were in little demand; muskrat skins sold at 16 to $19\frac{1}{2}$ cents per piece, or 10 to 15 per cent cheaper than in 1893. Following are some of the prices: Siberian sable, \$2.82 to \$70.60 per skin; marten, from 35 cents to \$2.12; blue fox, \$26.48 to \$353; bear, \$10.59 to \$26.48; castor, \$96.08 to \$706;

fox, 88 cents to \$1.77; polecat, 35 cents to \$1.41; ermine, 18 to 35 cents; hare, $1\frac{3}{4}$ to $2\frac{1}{2}$ cents. The value of skins and furs brought to the fair amounted to \$4,428,385. Their sales reached \$2,949,315.

Dressed leather was offered for sale in considerably less quantities than at the preceding fair. The following table indicates the principal items of this trade:

Description.	Amount of sales.	Selling price.
Polished black leather.....	\$247,100.00	*\$3.91 to \$8.80
Ox leather:		
White.....	} 79,425.00	{ *17.60 to 27.38 *24.50 to 39.20
Black.....		
Horse leather.....	52,950.00	*12.71 to 17.60
Calf leather.....	28,240.00	*27.38 to 35.20
Sheepskin and morocco.....	93,545.00	*1.46 to 2.69
Sole leather.....	134,140.00	*13.69 to 21.50
Soles.....	56,480.00	†8.83 to 21.18
Shoes and traveling bags.....	857,790.00	†8.83 to 21.18

* Per 100 pounds.

† Per piece.

The total of dressed leathers and leather manufactures offered for sale represented a value of \$2,118,000. The sales amounted to \$1,830,305.

By reason of the abundant harvest, the prices of cereals at the fair, as compared with the year preceding, showed a considerable decrease. The value of grains and flours brought to Nijni-Novgorod and offered for sale was \$657,094.32, divided as follows:

Description.	Quantity.	Value.
	<i>Pounds.</i>	
Wheat.....	43,175,291	\$337,635.68
Rye.....	16,120,686	66,549.33
Oats.....	8,301,282	39,848.41
Other cereals.....	8,066,699	68,586.84
Flour:		
Wheat.....	9,789,018	105,042.92
Rye.....	8,067,674	39,431.16

The average prices per 100 pounds were: Wheat, $78\frac{1}{2}$ cents; rye, $41\frac{1}{2}$ cents; oats, $47\frac{1}{4}$ cents; wheat flour, $\$1.07\frac{1}{2}$; rye flour, $59\frac{3}{4}$ cents.

The trade in drugs, dyes, and chemical and pharmaceutical products was very satisfactory. The total of these articles offered for sale amounted to \$1,129,600; the sales were \$1,023,700. Some of the prices were: Indigo—Batavian, \$1.17 to \$1.32 per pound; Bengal, 98 cents to \$1.08 per pound; Guatemalan, 78 to 88 cents per pound. The sale of indigo amounted to \$186,031. Caustic soda sold for $2\frac{1}{2}$ cents per pound, and bicarbonate of soda for $3\frac{1}{2}$ cents per pound.

The quantity of unwrought metals brought to the last fair was 314,058,053 pounds, representing a value of \$6,640,861.57. The Ural works sent

to Nijni-Novgorod 39,885,758 pounds of pig iron, 153,832,064 pounds of sheet iron, and 101,051,307 pounds of figured iron.

The prices of sheet-iron plates (size, 56 by 28 inches) were, per 100 pounds:

Weight of plate.	Price.	Weight of plate.	Price.
11 3 to 18 pounds.....	\$2. 69	6.3 pounds.....	\$3. 04
9 to 10.8 pounds.....	2. 74	5.4 pounds	3. 18
8.1 pounds	2. 79	4.5 pounds	3. 40
7.2 pounds	2. 89		

The prices of round and square iron were, per 100 pounds:

Thickness of iron.	Price.	Thickness of iron.	Price.
1 to 2 millimeters*.....	\$1. 81	4 millimeters	\$3. 09
2 to 3 millimeters.....	2. 00	4¼ millimeters	3. 29
3½ to 3¾ millimeters.....	2. 30	4½ millimeters	3. 57
3¾ to 3⅞ millimeters.....	2. 59	4¾ millimeters	3. 66
3⅞ millimeters.....	2. 83	5 millimeters	3. 86

* 1 millimeter=0.0394 inch.

The prices of tin plates were approximately the same as in 1893. There was a decline of 9¼ cents per 100 pounds for boiler plate. The quantity of pig iron offered for sale was much less than in preceding years, a large proportion of the Ural crude iron having been purchased at its places of production for the use of private metallurgical works.

The quantity of other metals brought to the fair was:

Description.	Quantity.	Description.	Quantity.
Copper:	<i>Pounds.</i>		<i>Pounds.</i>
Ural.....	1,913,936	Brass wire.....	144,448
Altai.....	794,464	Tin.....	541,680
Sheets	234,728	Pewter.....	451,288
Brass	288,896	Zinc.....	72,224

The trade in iron and copper manufactures gave very satisfactory results. The value of articles offered for sale was \$1,328,335, while the actual sales amounted to \$1,067,825.

As a result of the introduction of the new customs tariff, the prices of machinery-making machines were reduced. The sale of fire engines, sewing machines, and velocipedes reached the sum of \$113,948.40. The value of machinery and instruments at the fair was \$353,000, but the sales did not exceed \$230,500.

The trade in crystal ware, glassware, and ceramic products was unsatisfactory. The value of such articles brought to sell was \$744,830, while the sales only reached \$531,265.

The total amount offered for sale in the liquor trade may be stated as follows: Kizliar wine, \$141,200; Caucasian and Crimean wine, \$305,345;

foreign wines, \$139,435; brandies of all kinds, \$211,800; total, \$797,780; total amount of sales, \$727,180.

All the sugar brought to the fair was sold for a total of \$529,500. The prices of refined sugars varied, according to place of origin, from \$5.48 to \$5.87 per 100 pounds.

The sales of salted and dried fish reached \$1,526,725.

The wood offered for sale was: Building timber, joists, and boards, \$211,800; wooden articles, \$60,010; wooden boxes and trunks, \$130,610; furniture, \$70,600.

The sales of writing and printing paper and of cardboard produced \$158,850. Prices were as follows, per 100 pounds: White cardboard, rag paste, \$3.72 to \$3.92; gray cardboard, \$1.76; cardboard, straw paste, \$1.86 to \$2.05; white cardboard, wood paste, \$2.30.

There were 14,444,800 pounds of rags sold, for a total of \$176,500.

The tobacco offered for sale may be classified as follows: Makhorka smoking tobacco of ordinary quality, \$1,225,845.45; Makhorka snuff, \$89,309; tobacco of superior quality and cigars and cigarettes of Russian manufacture, \$264,997.10; cigars of foreign manufacture, \$5,295. The Makhorka tobacco sold at \$2.56 to \$3.18 per case of 45 pounds; snuff was quoted at \$2.29 per case.

Chinese goods, as in preceding years, consisted almost entirely of tea of different kinds and qualities. The quantity of tea offered for sale represented a value of \$7,554,200, distributed as follows: Imported by the land frontier (via Kiakhta and Hankow)—black tea, 73,000 cases; tea in bricks, 38,000 cases; tea in tablets, 5,500 cases; green tea, 23,500 cases; value, \$6,212,800. Imported by the maritime frontier (Canton tea), \$1,341,400.

The better and average qualities of tea were mostly in demand. Black tea of inferior grades, tea in bricks, and especially green tea offered few transactions. About 8,000 cases of Hankow tea of inferior grades, 2,000 cases of tea in tablets, and 3,500 cases of green tea in bricks, representing a value of \$494,200, remained without purchasers. The Canton tea trade was also inactive.

The sale of the different teas amounted to \$7,060,000. Prices varied as follows: Black tea of superior quality, per case of about 100 pounds, \$54.72 to \$70.60; black tea of average quality, \$47.66 to \$52.95; black tea of inferior quality, per case of about 108 pounds, \$44.13; black tea in bricks (64 to 72 bricks per case), \$23.65 to \$25.77; green tea in bricks, from Hankow (case of 45 bricks), \$20.47; green tea in bricks, from Kiakhta, \$17.45 to \$18.16; tea in tablets, per pound, 30 to 32 cents.

Persian goods consisted of raw cotton (7,000 bales), carpets (\$52,590), and dried fruits (\$592,334). On account of the abundant fruit crop of Persia, the prices of these articles were much lower than at the preceding fair. Almost all were sold.

HENRY C. MORRIS,

Consul.

GHENT, *June 13, 1895.*

RUSSIAN SEAL FISHERIES—TAXATION AND PRODUCTION OF TEA.

The Russian Government has granted a concession for seal catching on the coasts of Saghalien, St. Jonas Island, and other parts of the Sea of Okhotsk to a Russian company. A tax of 5 rubles in gold (\$3.86) is to be paid to the treasury on each skin, and it is expected that an expedition will be started this year. A Government official will sail on each boat engaged in seal catching.

TAX ON TEAS.

From January 1, 1896, in the whole Empire of Russia, it will be obligatory to sell all teas, except the cake and brick tea, only under the Government's revenue label. The tea will be wrapped in packages of one, one-half, one-fourth, one-eighth, one-sixteenth, one thirty-second, and one forty-eighth of a pound, on the premises and at the cost of the dealer. Each package will be labeled with a revenue band of the following rates: The bands for one-half pound and for one pound will cost 0.3125 copeck* each; for one-fourth and one-eighth of a pound, 0.1562 copeck each; and for one-sixteenth, one thirty-second, and one forty-eighth of a pound, 0.078 copeck each. This extra tax, as will be seen, is not heavy, and the reason for making it so light is that the Government did not want to burden the dealer with an expense that would compel him to raise the price of tea. Although the extra tax is small, the income from it in a year will amount to considerable to the treasury, because in Russia a large quantity of tea is used. Packing of tea can also take place at the custom-houses or at any other place when the Minister of Finance approves of it. The labeling will be done under the supervision of specially appointed controllers. Should open packages containing tea be found at any place where tea is sold, they will be confiscated and the dealer fined five times the amount of duty due on the packages. Public places where hot tea is sold will be allowed to keep several small open packages, not to exceed in weight 3 pounds in all. Persons keeping for sale adulterated tea or tea substitutes will be fined 300 rubles or imprisoned not to exceed three months and the goods confiscated. Dealers selling adulterated tea knowingly will be punished according to paragraphs 173 to 176 and 181 of the Russian code.

Notwithstanding the yearly increase in the consumption of tea in Russia, its importation decreases from year to year, as will be seen from the following figures: From 1879 to 1893, 43,358,703 pounds of tea were imported annually, and from 1884 to 1888, the annual import was 43,256,759 pounds, showing an annual decrease of 101,944 pounds; the import from 1888 to 1892 fell to 40,457,827 pounds per annum. When it is admitted that from 2,170,000 to 2,530,000 pounds of tea are smuggled yearly into Russia, the

* 1 copeck=about three-fourths of a cent.

difference must consist of adulterated teas. From the examination of all the adulterated teas found in Russia, only the so-called Caucasian cranberry tea has been acknowledged by the medical department to be harmless, and, therefore, it is fabricated in great quantities. It looks like the Chinese tea, gives a strong, sour infusion of the color of real tea, and, in a dry state, has an odor very much like the genuine. All the other falsifications, such as tea that has been used and dried again, and such as are made of different leaves and herbs, have been found to be unwholesome, but serve as very profitable mixtures for the tea dealers.

The proof of how much business is done in Russia with adulterated tea is striking. The Government experts, after making examinations at different large cities, reported that in St. Petersburg, out of thirty-eight samples, they found fifteen adulterated; in Moscow, out of twenty-four samples, thirteen were adulterated; and in Warsaw, out of forty samples, eighteen were adulterated. The Government has already tried to root out this evil in various ways, but on account of the extent it has reached has not succeeded so far; consequently, this new measure has been adopted not only to raise more revenue from tea, but also to protect the Russian tea consumers against adulterated teas.

ANALYSIS OF TEA RAISED IN RUSSIA.

In the chemical laboratory of the Caucasian sericultural station, an analysis has just been completed of the first and second crops of tea harvested by Colonel Solowzow on his tea plantation in Chakva, with the following result:

	Per cent.
Thein (first crop).....	*1.99
Soluble matters:	
First crop.....	32.37
Second crop.....	35.96
Specific gravity: †	
First crop.....	1.01051
Second crop.....	1.01221
Tannin:	
First crop.....	11.06
Second crop.....	13.76
Ash:	
First crop.....	4.21
Second crop.....	4.15
Water:	
First crop.....	13.23
Second crop.....	13.92
Nitrogen.....	4.66

The percentage of water shows 3.61 per cent above the average for black teas. This results from somewhat insufficient drying, very excusable in the first attempt at preparing tea.

* Somewhat more than the average quantity of black tea. † At 20° C.

By comparing the foregoing figures with the average compositions contained in black teas, it is found that the tea of the first crop belongs to the species of middle quality, but of the second crop to the species of very good qualities.

The Chakva tea, according to its essential qualities, belongs to the species of black tea. Tea grows in Chakva very well, and large areas can be occupied for its cultivation. On account of this favorable result, and by improvement of the method of drying and gathering, I have no doubt that tea culture will acquire great dimensions and that the Chakva tea will be in great demand in Russia. Thus, the Russian Empire is enriched by a new and important product.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *May 28, 1895.*

RUSSIA AND THE CHINESE LOAN.

The conclusion of the Chinese loan, which, for some time past, has attracted wide attention, has been delayed by many difficulties, but has now been settled with Russia and France, the agreement for the issuing of a 4 per cent gold loan by Russian and French banking houses having been signed July 6.

The loan is for 400,000,000 francs, or 100,000,000 rubles (\$77,200,000). The following banking houses are interested in the loan: In Paris, Hottinger & Co., the Paris-Netherland Bank, the Credit Lyonnais, the Trade and Industry Society of France, the National Discount Bureau of Paris, and the Commercial Credit Society; in St. Petersburg, the International Discount Bank, the Foreign Trade Bank of Russia, and the Volga and Kama Bank.

The Chinese Government binds itself not to proceed either to conversion or to redemption of the loan for the term of thirty-six years, and not to issue or permit to be issued any gold loans guaranteed by the Government before January 15, 1896. The loan is guaranteed by the Chinese maritime customs, and the deposit of the receipts is provided for. In case China should fail to make punctual payments of the loan at the stipulated periods, Russia will assume the responsibility of meeting the obligations, and for that purpose the Czar issued on July 7, 1895, an imperial ukase relating to the guaranty, which says:

In all cases in which, on any ground whatsoever, the sum required for the payment of the coupons as they fall due and the drawn bonds of the Chinese loan are not placed at the disposal of the banks and banking houses which are charged with this payment at the appointed time, the said banks and banking houses will be provided with the necessary resources at the charge of the Russian Government, on conditions which the Russian Government (that is, the Minister of Finance) has laid down.

The prospectus of the loan was issued July 14, announcing that a subscription would be issued on July 19 at the following rates and conditions: The obligations will be issued at 99.2 per cent—that is, 124 rubles in gold (\$95.728) for an obligation of 125 rubles in gold (\$96.50). The interest is payable July 1, 1895. The payment can be effected in the following manner: Twenty-five per cent at the subscription (July 19) for an obligation of 125 rubles, nominal, 31.25 rubles; 25 per cent at the distribution from July 25 to August 1, 1895, nominal, 31.25 rubles; 25 per cent from September 11 to September 13, 1895, nominal, 31.25 rubles; 24.2 per cent from October 25 to November 1, 1895, nominal, 30.25 rubles; or, 99.2 per cent at a total nominal of 124 rubles.

From the day of distribution the subscribers have the right, if they desire, to pay the obligation in full before the fixed term of taking discount at the rate of 4 per cent per annum; thus, the price of the 125 rubles' obligation would be 123.55 rubles, or, taking into consideration the percentage accumulated from July 1 to August 1, 1895—*i. e.*, 42 copecks—the bond would be obtained at 123.13 rubles—98½ per cent. Until the obligations are ready, the banks will issue temporary nominal certificates, which will be exchanged for the authenticated bonds in due time. In case the subscription should exceed the sum of the loan, a distribution will be made. Paris, Amsterdam, Brussels, and Geneva have been named where subscriptions may be made.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *July 15, 1895.*

WOOL MARKET IN RUSSIA.

From the beginning of June up to the middle of July, when all the newly-cut wool has gone into the markets of Russia and western Europe, some of the rarest bargains in uncleaned wool are to be had at the fairs, specially organized for the wool commission, and also in the neighborhood markets of the sheep-raising region.

The wool trade throughout the sheep-raising district during the present season has been unusually good. The bettered conditions of the wool trade in western Europe exerted noticeable influence upon the Russian markets and fairs, whose season opened with a rather dull outlook.

Of the two fairs held at Warsaw and Kharkov in June, only the latter proved successful. Owing to the fact that the winter season of this year was unfavorable to the manufacturers of woollen goods in Warsaw, the wool buyers remained quiet during the fair. Out of the 2,469,735 pounds of wool which were for sale at the fair, only 28 per cent was purchased by wool buyers, while the remaining 1,778,219 pounds were left in the possession of the producers. After the fair, however, the Warsaw market revived, and owing to the fall in prices, wool buyers were anxious to make bargains and bought up the quantity of wool which remained unpurchased at the fair.

The July markets opened with still better prospects, owing to the arrival of foreign buyers, who had been up to this time absent.

The fair at Kharkov closed with commendable results. Owing to a large number of foreign buyers who attended this fair, nearly all the wool put upon the market was purchased by them. The large manufacturers, who generally fix the prices on wool, made very light purchases this year, while, on the other hand, the principal sales were to speculators. The prices on wool kept increasing gradually, reaching from 11.71 cents to $13\frac{3}{4}$ cents per pound at the close of the fair. The sales of the uncleaned fleece wool in Tsaritsin and its neighboring regions during the same period remained very steady. The bargains were principally made in localities of production, and the chief buyers were local washers. The wool sold at prices 26 to $41\frac{3}{4}$ cents higher per pood (36.112 pounds) compared with the prices of the month of May, and at present the greater part of the unwashed wool is already sold.

In Rostoff-on-the-Don, the markets were rather quiet, the absence of foreign demands making bargains to conclude very slowly. The prices were approximately the same as those of last year, and the buyers pronounce them rather high for the present season's crop, as the wool is light and thin and easily torn. The producers, on the other hand, say they are unable to sell this year's crop at the low prices of last year without serious loss to themselves. The loss in the weight of the wool, according to their calculations, amounts to 10 per cent, so that the total amount of wool on sale in the present year's market does not exceed 36,112,000 pounds, while in 1894 it amounted to 39,723,000 pounds. The latest reports, however, are that even here the prices have risen and remain steady.

In Moscow, the scarcity of wool of high qualities made the market very dull, despite the fact that the prices have risen one-half cent per pound.

In the western European markets, the sale of wool was very steady, especially in Berlin and at the principal German fairs which took place in June. Owing to a decrease in the number of sheep raised, the quantity of wool brought to the markets was also lessened; but it was of a very good quality, and satisfied the demands of the manufacturers. The prices rose, not only compared with those of the month of May of the present year, but even with those of June and July of 1894. At the beginning of July, the wool market was still more quiet, although the prices did not decline.

The wool trade in France was not as satisfactory as in Germany, especially in Marseilles, where, at the beginning of June, the prices fell a little, due exclusively to the sellers who wanted to sell their supplies of old wool; but during the month, the demands from local and foreign buyers increased, the markets being free from old supplies, and the prices advanced.

The sale of colonial wool in Antwerp between July 7 and 19 was very lively. The prices on all kinds of wool rose 5 per cent compared with the month of April. The mongrel wool was in greatest demand.

In London, the sale of wool during the period between the third and fourth auctions of colonial wool was very quiet. The demands from the United States were very large and the quantity of raw wool exported to that country increased every month. Large numbers of buyers, both local and foreign, went to these auctions. It must be observed, however, that the activity of the auctions was somewhat speculative, especially so on the part of American buyers, who caused the prices to rise by buying up large quantities. English speculators also bought large quantities. The French and German manufacturers began to purchase only during the second half of the auction and did not buy large quantities. The prices during the auction rose from 10 to 15 per cent, especially on the higher and middle qualities of wool. The total amount sold at this auction was: 60,000 bales to America; 158,000 bales to England, and 138,000 bales to Continental Europe; 34,000 bales were returned after the close of the auction.

JOHN KAREL,
Consul-General.

ST. PETERSBURG, *August 1, 1895.*

POTATO TRADE OF SCOTLAND.

The potato trade between Scotland and the United States, at best an uncertain quantity, has, during the season just closed, fully maintained its character. The forecasts of the crop in the United States gave indications that the yield would be much below the average, and led exporters here to expect that the large exports of the previous season would be at least maintained, if not exceeded. How far these expectations have been borne out is shown by the following statement, which gives the respective quantities and values of potatoes shipped from Dundee during the past two seasons, and I take it that these figures are a fair criterion of the business done at the other ports in Great Britain from which shipments are made:

Month.	Quantity.			Invoice value.
<hr/>				
1894.	Tons. cwt. grs.			
October.....	188	0	2	\$3,238. 17
November.....	336	12	0	6,774. 65
December.....	764	11	2	15,840. 33
<hr/>				
1895.				
January.....	1,114	19	0	23,757. 22
February.....	294	6	0	6,095. 35
March.....	1,106	5	0	26,370. 76
April.....	739	11	2	16,684. 34
May.....	113	5	0	2,483. 35
<hr/>				
Total for 1894-95.....	4,657	10	2	101,244. 17
Total for 1893-94.....	31,745	0	1	554,268. 45
<hr/>				
Decrease for 1894-95.....	27,087	9	3	453,024. 28

From this, it will be seen that, in point of tonnage, the shipments of 1894-95 fell short of those of 1893-94 by 27,087 tons, a decrease of fully

85 per cent, and in point of invoice value by \$453,024, a decrease of 82 per cent. With regard to the invoice value, it is proper to say that the price stated in the invoice is a nominal one, and does not correctly represent the value of the shipments, the price given, as a rule, being in excess of the actual market value. This is probably done with a view of inducing the commission agent to get a better price for the potatoes, and does not affect the import duty, which is specific. One has not to look far to find the causes which have combined to produce the falling off in last season's business. Contrary to expectation, the crop in the United States was largely in excess of the estimated yield, while in Great Britain, not only was the crop a very short one, but a winter of unusual severity made the handling of stocks a matter of great risk. As a result, prices here advanced from \$5 to \$7.50 per ton over those of the previous year, while prices in the United States were from \$6.50 to \$9.75 per ton less. This fall in price, however, was in part counterbalanced by a reduction of about \$3.75 per ton in the import duty. The consequence was that dealers gave their attention to the home trade, and enormous quantities were shipped to London and the southern ports of England, where they found a ready market.

As a rule, except when there is a large surplus crop, shippers, for various reasons, much prefer the home trade, because, first, it takes fully two weeks after shipment for potatoes to reach the United States, and, in this time, considerable fluctuations in the price may take place, which might prove a serious matter, as shipments are invariably made on consignment, whereas in the home trade the prices obtainable on the arrival of shipments are substantially those at the time of shipment; second, the risk incident to the transportation is much less; third, returns are quicker.

The Government reports showing the acreage under cultivation this year are not yet available, but it is thought that the amount is in excess of that of last year, and although the season has so far been a remarkably dry one, the crop appears to be in a flourishing condition.

JOHN M. SAVAGE,

DUNDEE, *June 19, 1895.*

Consul.

RECENT COMMERCE OF ITALY.

The exports from Italy during the five months ending May 31, 1895, were over 44,250,000 francs (\$8,350,598) less than for the corresponding period of the year 1894, as will appear from the following table:

Month.	1894.	1895.	Decrease.
January.....	\$12,340,355	\$11,298,044	\$1,042,311
February.....	15,913,540	13,519,184	2,394,356
March.....	18,259,507	16,602,547	1,656,960
April.....	19,819,394	17,044,574	2,774,820
May.....	17,988,789	17,506,638	482,151
Total.....	84,321,585	75,970,987	8,350,598

In this falling off, silver bars and coin no longer current figure for \$2,421,499. This item did not appear in last year's statistics.

The principal articles in which there was an important falling off are:

Articles.	Decrease.	Articles.	Decrease.
Olive oil.....	\$2,868,186	Grain.....	\$921,675
Wine.....	302,573	Cattle.....	936,438
Cotton.....	1,041,386	Silk.....	200,135
Silver and coin no longer current.....	2,421,499	Chemical products.....	176,821

The decrease in the export of olive oil during the spring of 1895 is due to a short olive crop in 1894.

By royal decree of December 10, 1894, raw cotton, heretofore free, was made to pay a duty of 57 cents per 220 pounds. Cotton no longer finds its way to Switzerland and Germany through Italy. The importation of cotton has been confined to the wants of the mills, because cotton that leaves Italy, to enjoy the benefit of the drawback allowed by royal decree, must first have been worked up in Italy.

The falling off of nearly \$1,000,000 in the export of wheat shows that more Italian wheat was used at home.

The exportation of cattle was very much stimulated last year by the high rate of exchange that prevailed at that time.

The falling off in exports is due to causes, foreign to the normal activity of the country, which do not disturb the economic conditions of Italy. It is proper to note that the exports are much larger during the last six months of the year, consisting as they do largely of agricultural products that are only ready for market at that time. The month of May shows an improvement in exports.

Imports for the first five months of 1894 and 1895.

Month.	1894.	1895.	Increase.	Decrease.
January.....	\$14,577,291	\$14,098,946	.....	\$478,345
February	15,119,078	15,542,888	\$423,810	.....
March.....	17,480,918	20,730,927	3,250,009	.....
April.....	17,576,096	19,722,840	2,146,744	.....
May.....	17,229,792	19,829,180	2,599,388	.....
Total.....	81,983,175	89,924,781	8,419,951	478,345

The imports for the first five months of 1895 exceeded by \$7,941,606 those for the corresponding period in 1894. The articles that show the greatest increase in importations are:

Articles.	Increase.	Articles.	Increase.
Raw silk.....	\$2,227,945	Horses.....	\$760,919
Grain (barley and indian corn).....	2,005,375	Flax and jute (raw).....	626,719
Resin.....	878,404	Dyeing and tanning materials.....	497,862
Wool.....	1,361,328	Raw hides.....	441,087
Metals and machinery.....	776,933	Lumber and straw.....	296,462

With the exception of the increased importations of sugar, coffee, grain (particularly barley and indian corn), and horses, all other increased importations refer to raw materials introduced into Italy to be there worked up. The increased importation of resin was no doubt due to rumors that a higher duty was soon to be levied. The raw silk imported will be counterbalanced at the end of the year by the amount exported. The increase of \$2,227,945 in the imports of raw silk denotes greater activity in Italian mills.

The increased importation of raw wool, lumber, machines, weavers' looms, oleaginous seeds, and horses is worthy of note.

The following table shows the importation of raw wool for the first five months of the last five years :

	Pounds.
1891.....	8,308,960
1892.....	10,011,980
1893.....	9,209,420
1894.....	8,177,940
1895.....	13,959,220

Wool is imported principally from Central and South America (5,896,440 pounds) and France (2,936,220 pounds). The consumption of raw wool has increased 30 per cent within the last five years.

The cotton industry in Italy is in a flourishing condition. Weavers' looms valued at \$591,045 and spinning machinery valued at \$482,500 were brought into Italy during the first five months of 1895. The machinery comes from England, Germany, and Switzerland.

There has been a considerable increase in the introduction of zinc, cast iron, copper, and brass.

Raw hides show an increased importation of over \$400,000.

Of coal, 2,000,000 tons less were imported this season. This simply means that the Government sold that amount to the trade from the enormous stock it laid up in 1893 for the Italian navy.

WALLACE S. JONES,
Consul-General.

ROME, *July 9, 1895.*

AMERICAN TRADE OPPORTUNITIES IN VENEZUELA.

As the past twelve months have been eventful ones for Venezuela in her efforts for political and economical reorganization, I have the honor to submit certain observations based upon the statistical reports of the fiscal year just closed.

The triumph of the Legalist revolution in 1892 left Venezuela in a state of absolute prostration, with both her foreign trade and domestic industries practically paralyzed, but, on account of the general confidence inspired in the beginning by the new government, the adoption of the eagerly desired formed constitution, and the great natural resources of the country, it was

not long before business began to revive and foreign trade to assume something of its former proportions.

This should have been the opportunity for the United States to redouble its efforts of the last twenty years, if not for commercial supremacy, for at least a fair share of this already valuable and rapidly increasing trade, but at this juncture, our manufacturers and exporters found themselves sadly handicapped by the duties imposed upon Venezuelan products imported into the United States. Previous to the adoption of this measure, which was decided upon when the government of this country during the administration of President Andueza Palácio declined to accept the reciprocity propositions of the United States, our commercial relations with this coast were eminently satisfactory, and our import and export trade was increasing most rapidly.

During the year 1891, the port of Maracaibo alone shipped to New York for consumption in the United States products to the value of over \$8,000,000 (gold). This meant the purchase from the United States of a vast amount of merchandise of every description in preference to seeking the same in Europe, as it is indisputably cheaper and more convenient to buy where one sells and has his credits, and it was noticeable that the condition of the export trade from Maracaibo to the United States had a direct influence upon the shipments of our merchants and manufacturers to this country.

It was then believed that United States exporters were fairly on the road to commercial victory, for which they had so long struggled, but when it was finally announced that duties would be levied upon Venezuelan products introduced into the United States, the situation underwent an immediate change. Maracaibo coffee—the choicest grown in the Republic—was previously practically unknown in Europe. All was shipped to the United States, and with the constant yearly increase in the quantity and value of this product, there was a proportional increase in the quantity and value of American goods imported into this section. The almost immediate result, however, of the imposition of the duties referred to was the throwing open of the European markets to the coffee of this section and the consequent purchase in Europe of a large proportion of the merchandise previously imported from the United States. Our trade thus steadily decreased, and when the duties were finally removed and Venezuelan coffee was again permitted free entry, it is safe to say that scarcely more than one-tenth of the quantity which formerly found a market in the United States was entered for consumption. Since then, matters have improved, although our trade is still suffering, and will continue to suffer for some time longer from the forced diversion to Europe of the exports of this country.

The fiscal year just closed shows a cheering improvement, there having been exported during that period from Maracaibo to New York products to the value of more than \$7,500,000, as compared with \$4,000,000 during the year ending June 30, 1894.

It is true that a large proportion of these exports have been shipped to the United States, not for entry, but for reshipment to foreign ports, and this,

no doubt, will continue for a certain period, until all the contracts made between Maracaibo exporters and European merchants when the duties were in force in the United States shall have been filled ; but it is to be hoped that then the United States will be able not only to secure lost ground, which is the task of most difficulty, but to outstrip Old World rivals even more rapidly than before.

It is to be regretted that while the foreign trade of Venezuela has greatly revived since the close of the revolution, there is still much business depression in the country.

No cabinet has seemed to be able to solve the financial problems which the war left as a legacy to the nation, and there appears to be a universal disinclination on the part of capitalists to allow their means to get beyond their immediate reach. Business enterprises seem to be contracting rather than expanding, and the financial policy of the Government is being criticised and held responsible by many for the hard times which are felt throughout the Republic. It is only fair to say that the Government does not lack warm defenders, who insist that the good results of its present policy will soon be apparent and that the country will enter, before long, upon an era of prosperity and contentment.

In this country, political conditions have always had a great influence upon the commercial and industrial situation, and one of the causes of the general prosperity during the long autocracy of Guzman Blanco was the supposed stability of the Government.

Should the present economic crisis happily pass and a revival take place in all industries and branches of trade, it will be a great opportunity for the United States, now that our hands are no longer tied by the existence of discriminating duties upon Venezuelan products, for Venezuelan complications with European powers give us a great advantage.

The Germans, who have been and are our great commercial rivals, are now looked upon with but little favor on account of the threat to send German ironclads to La Guayra to enforce the payment of a subsidy due the builders of the principal Venezuelan railway. The popular feeling upon this point was intensified by a suggestion in a leading newspaper that the Germans knew very well that such payment was just now an impossibility, as the country was still staggering under the burdens of the late war, and that they neither expected nor desired payment, but, encouraged by the example of Great Britain, they probably imagined that it might be possible to secure a part of the rich Guiana territory as an indemnity.

Great Britain also is one of our most formidable commercial adversaries, and the feeling against that nation is now intense throughout Venezuela. Pamphlets and newspaper articles are constantly being published respecting British aggressions, the most of which are bitterly hostile, but as these rarely, if ever, circulate outside the country, the world at large is not acquainted with the state of feeling.

Respecting the other nations of Europe whose commercial rivalry affects our interests, none are to-day on the best terms with Venezuela on account

of the document published in the official "green book" of Italy and signed by various ministers to Venezuela reflecting upon the good faith of the Republic. The immediate delivery of their passports to the offending diplomats caused much resentment at the European courts concerned, and in this country also the incident has been by no means forgotten.

I take the liberty of making the foregoing observations simply to point out that the United States have to-day everything in their favor, especially as Venezuela is now, as never before, looking to the United States for counsel and guidance.

Apart from political considerations, there is no doubt that the people of this country would prefer to trade with the United States rather than with Europe, provided their interests would be equally served. New York is now but six days from the Venezuelan coast, and the service given by the Red D line, both as to passage and freight, leaves nothing to be desired. It is not too much to say that this American company has been one of the principal factors in building up our trade on this coast, and the exigencies of augmented traffic have always been promptly met by an extension of the service.

It is to Americans also that Venezuela looks to-day for the development of her great natural resources, and the Government would be glad to grant most favorable concessions to companies or individuals from the United States who come in good faith for that purpose.

The possibilities of this country, as well as of the other Spanish-American republics, are as yet but little understood by our people at large, but if we do not now take advantage of the exceptional opportunities offered us we will regret, at no distant day, that we did not see more clearly into the future.

Peace and order at home and freedom from foreign complications are all that is necessary to insure a brilliant future for this Republic. With its vast territory and fertile soil, where, on account of the diversity of climate, productions of all the different zones can be grown, the perfect salubrity of its table lands, the abundant mineral wealth existent in every province, and its 1,800 miles of seacoast, no section of the continent can offer greater attractions, and the nation which shall wield the chief political and commercial influence in the Venezuela of the future may indeed congratulate itself upon its good fortune.

Whether our merchants and manufacturers will carry on an energetic campaign is now the important question. The field is open and circumstances are in their favor, and, although I regret to say it, they might well take a lesson from the methods of their European rivals, who secured and held for years a virtual monopoly of this trade.

E. H. PLUMACHER,
Consul.

MARACAIBO, *July 12, 1895.*

EXAMINATIONS FOR THE CONSULAR SERVICE.

By an Executive order, dated September 20, 1895, the President of the United States directed that, thereafter, any vacancy in a consulate or commercial agency with an annual salary or compensation from official fees of not more than \$2,500 nor less than \$1,000 should be filled by transfer or promotion from some other position under the Department of State of a character tending to qualify the incumbent for the position to be filled; by the appointment of a person not under the Department of State, but having previously served thereunder to its satisfaction in a capacity tending to qualify him for the position to be filled; or by the appointment of a person who, having been selected by the President for examination, is found, upon such examination, to be qualified for the position. Posts which pay less than \$1,000 being usually filled by selection from residents of the locality, it was not deemed practicable to put them under the new system. Excluding these places, numbering 71 at present, and also the places above \$2,500, numbering 53, the number of consular positions within the scope of the order is 196. But as the consular officers who receive less compensation than \$1,000 are paid by fees, and these fluctuate and will probably increase with the return of improved business conditions, the number of places that may be included in the new system of appointments is, as yet, undetermined. For this reason, an attempt to give a list of places accessible under the Executive order would be misleading.

LETTER OF THE SECRETARY OF STATE.

The action of the President was based upon a communication from the Secretary of State, as follows:

The President:

SIR: Complaints of the consular service of the United States, of the incompetency of consuls, and of the injurious consequences to great public interests, are not infrequently brought to the notice of the Department, sometimes by direct communication, but more commonly through the medium of the public press. That they are not always well founded is clear, and instances are by no means rare in which interested parties indulge in the severest condemnation of officials whose only fault has been a proper adherence to the line of their legitimate duties. Merchants, or others, who demand that public functions shall be ignored or exceeded for the promotion of particular and private ends, ought to find themselves disappointed, and, if they are, may be expected to rail without stint at the officer who has refused to be their tool. Nevertheless, the consular office is of great importance in its relation to the commercial interests of the country—every consul should, so far as practicable, be chosen for his special fitness for the particular posi-

tion in which he is to serve—and it can not be denied that, while complaints against consuls are in some cases unwarranted, there are only too many others which can not be so regarded. It is contended by Boards of Trade, Chambers of Commerce, and other like bodies all over the country, that if our consular service were what it should be and our consuls were officials chosen for their fitness for the duties to be discharged by them, the results to the trade and commerce of the country would be of the most favorable character. The contention seems reasonable in itself, and is supported by the practice and experience of Great Britain and other European countries. Congress has, to some extent, recognized its justness by the statutes providing for consular pupils and consular clerks to be appointed upon satisfactory evidence of qualification, derived through examinations or otherwise. By the act of 1864, these officials, originally limited to twenty-five in number and called consular pupils, are designated as consular clerks and limited to thirteen in number, and are not to be removed from office except for cause stated to Congress in writing. It is pertinent to note, also, in this connection, that at the last session of Congress, bills to improve the consular service by securing competency and fitness in its officers, were introduced into the Senate by representatives of both political parties. It is the executive branch of the Government, however, which might be expected to be most strongly impressed with the defects of our consular service, and by which appropriate measures for removing them would most naturally be initiated.

Hence, it is not surprising to find that in 1866, the Department of State promulgated an order requiring all applicants for consulates to present themselves for examination at the Department. Neither the original order nor any copy of it can now be found. But the Board of Examiners, consisting of the Second Assistant Secretary of State, the Examiner of Claims, and the officer in charge of the consular division, met, organized, and held examinations under the order, and out of nine applicants, approved seven as satisfactory. The other two were held not to be qualified, one because lacking in knowledge of foreign languages, the other because of general incompetency. It does not appear that more than one examination was held under this order of 1866, and the next step taken in the same direction seems to have been by an executive order of April 16, 1872. How much was done under this regulation is not clear, and at all events it was soon superseded by the executive order of March 14, 1873. This order, made like that of April 16, 1872, under the civil service act of March 3, 1871, and during the life of the Commission organized under that statute, is as follows: "Vacancies occurring in any grade of consulates or clerkships in the Department may be filled either by transfer from some other grade or service, clerical, consular, or diplomatic under the Department of State, or by the appointment of some person who has previously served under the Department of State to its satisfaction, or by the appointment of some person who has made application to the Secretary of State with proper certificates of character, responsibility, and capacity, in the manner provided for

applications for consulates of which the annual compensation is more than one thousand dollars and less than three thousand dollars, and who has, on examination, been found qualified for the position."

Under this order, an Examination Board was organized by the Secretary of State, consisting of three officials serving in the State Department at Washington. A general regulation was also adopted, by which, upon a consulate becoming vacant, notice in writing in a form prescribed by the Secretary of State was sent to applicants for consulships.

This notice stated in substance that the vacancy had occurred; that the applicant was to attend for examination at the State Department on the day named; that in addition to the usual subjects, he would be examined upon the third and eleventh chapters of the first volume of Kent's Commentaries, and upon the "Regulations for the Consular Service of the United States;" that reasonable time would be given an applicant to familiarize himself with such "Regulations," copies of which could be had for eighty cents; and that before such examination, the applicant must file with the Department a paper certifying to his honesty, trustworthiness, good repute, steady habits, and capacity to perform the duties of a consul, and signed either by a person personally known to the Secretary of State, or by some person with means of information vouched for by one personally known to the Secretary of State. Conformably to these regulations made under the executive order of March 14, 1873, quite a number of persons were examined during the years 1873 and 1874. The examinations were conducted through questions and answers in writing, and the examination papers are still on file in the Department. The system thus generally described is said to have worked well in practice, and to have both improved the consular service and relieved the Department of much embarrassment. It was nevertheless short-lived, and though the necessary connection between the two things is not obvious, it seems to have been given up simultaneously with the relinquishment of its functions by the Civil Service Commission of 1871, a relinquishment brought about by the refusal of Congress to make any appropriations for that branch of the service.

The Civil Service Act of 1871, now in force as section 1753 of the Revised Statutes, authorizes the President "to prescribe such regulations for the admission of persons into the civil service of the United States as may best promote the efficiency thereof, and ascertain the fitness of each candidate in respect to age, health, character, knowledge, and ability, for the branch of service into which he seeks to enter; and for this purpose he may employ suitable persons to conduct such inquiries, and may prescribe their duties and establish regulations for the conduct of persons who may receive appointments in the civil service." It may be that these statutory provisions can not be so utilized as to bring about that complete reform and improvement of the consular service which are universally conceded to be desirable. It may be that costly and elaborate machinery of the character provided by the Senate bills already referred to will be found necessary to that end.

But, even if that be so, it is still to be remembered that the provisions of those bills have not yet been enacted by Congress and may never be, and that meanwhile, it can do no harm, and may do much good, to make a thorough trial of the efficiency of such regulations as are authorized by section 1753 of the Revised Statutes. I therefore venture to recommend the adoption of an executive order in the terms of a paper which is hereto appended, marked B. It differs in detail, rather than in principle, from the other executive orders already referred to. It assumes that consuls may properly be chosen from two classes of persons without examination, namely, from persons already in the service of the State Department, or from persons formerly in its service, and who in each case have not only satisfactory records of service, but of service tending to qualify them for the duties of consul. It requires all other persons, being first selected as eligible for examination upon the ordinary proofs of competency and good character, to submit themselves to an examination designed to test their aptitude and fitness for the special functions of the consular office. Thus, on the one hand, the appointing power is left at liberty to avail itself of whatever special capacity and fitness for the consular office actual service has demonstrated to exist. On the other hand, by reserving to itself the designation of the persons eligible for examination, the appointing power protects itself to some extent at least from the errors sure to follow from absolute reliance upon purely academic tests of fitness. Finally, it should be borne in mind that the order now recommended is in no sense final or exhaustive. Experience will doubtless prove in what respects it may be amended or enlarged to the advantage of the public interest. But meanwhile, it may surely be claimed for it that it will be at least a step in the right direction, and a step to be judged of not by the advance it itself makes, but by the advance it may rightly be expected to inevitably lead to.

The incumbents of such consular offices as are scarcely inferior in dignity and importance to that of minister must, it is believed, continue to be selected as heretofore at the personal discretion and upon the personal responsibility of the Executive. It is to be borne in mind, too, that there are a large number of such offices the emoluments of which are less than \$1,000—the lowest salary attached by law to any consular position—which are paid only by fees, and which, as a rule, must be filled from the residents of the particular locality where the office is established. The annexed order, therefore, does not apply to either of these classes. On the other hand, it does in terms apply to commercial agents, so called, officers with functions to all intents and purposes the same as consuls, and thus embraces within its operation nearly three-fourths of the whole number of consular and quasi consular offices of such rank and yielding such compensation as to be desired and sought for by citizens resident within the United States.

Very respectfully,

RICHARD OLNEY.

September 17, 1895.

EXECUTIVE ORDER.

It being of great importance that the consuls and commercial agents of the United States shall possess the proper qualifications for their respective positions to be ascertained either through a satisfactory record of previous actual service under the Department of State or through an appropriate examination :

It is hereby ordered that any vacancy in a consulate or commercial agency now or hereafter existing the salary of which is not more than \$2,500, nor less than \$1,000, or the compensation of which, if derived from official fees, exclusive of notarial and other unofficial receipts, does not exceed \$2,500, nor fall below \$1,000, shall be filled (*a*) by a transfer or promotion from some other position under the Department of State of a character tending to qualify the incumbent for the position to be filled; or (*b*) by appointment of a person not under the Department of State but having previously served thereunder to its satisfaction in a capacity tending to qualify him for the position to be filled; or (*c*) by the appointment of a person who, having furnished the customary evidence of character, responsibility, and capacity, and being thereupon selected by the President for examination, is found upon such examination to be qualified for the position.

For the purposes of this order notarial and unofficial fees shall not be regarded, but the compensation of a consulate or commercial agency shall be ascertained, if the office is salaried, by reference to the last preceding appropriation act, and if the office is not salaried, by reference to the returns of official fees for the last preceding fiscal year.

The examination hereinbefore provided for shall be by a Board of three persons designated by the Secretary of State who shall also prescribe the subjects to which such examinations shall relate and the general mode of conducting the same by the Board.

A vacancy in a consulate will be filled at discretion only when a suitable appointment can not be made in any of the modes indicated in the second paragraph of this order.

GROVER CLEVELAND.

EXECUTIVE MANSION, *September 20, 1895.*

ORDER OF THE SECRETARY OF STATE.

In pursuance of the Executive order of September 20, 1895, the Third Assistant Secretary of State, the Solicitor of the State Department and the Chief of the Consular Bureau, or the persons for the time being respectively discharging the duties of said offices, are hereby constituted a Board, whose duty it shall be, by appropriate examination, to determine the qualifications for the respective positions of persons selected for such examination by the President and applying for such consulates and commercial agencies as are

included within the scope of said order. Vacancies occurring in said Board, or such changes in the membership thereof as experience may prove to be desirable, will be dealt with by additional regulations as occasion may require.

The examination herein provided for shall be held from time to time at the State Department in Washington, upon such notice to candidates as shall give them reasonable opportunity to attend for the purpose in question.

Such examinations shall be by questions and answers in writing, unless for special reasons the Board consider it desirable in any particular case to conduct an examination *viva voce*, in which case, however, a stenographer shall be present and shall report all the proceedings.

The subjects to which an examination shall relate shall be:

(1) General education, knowledge of languages, business training and experience.

(2) The country in which the consul or commercial agent is to reside, its government, chief magistrate, geographical features, principal cities, chief production and its commercial intercourse and relations with the United States.

(3) The *exequatur*, its nature and use.

(4) Functions of a consul or commercial agent as compared with those of a vice-consul or consular agent; relation of former to latter, also to the United States minister or ambassador at the capital of the country.

(5) Duties of a consul or commercial agent as regards:

(a) Correspondence with the State Department and the form thereof.

(b) Passports, granting and visaing.

(c) United States merchant vessels in a foreign port, and their crews, whether seeking discharge, deserting, or destitute.

(d) Wrecks within the jurisdiction.

(e) Wrongs to United States citizens within jurisdiction.

(f) Invoices.

(g) Official fees and accounts.

(6) Treaties between the United States and the foreign country.

(7) Relations of ambassador and minister to laws of the country to which they are accredited, as compared with those of consul or commercial agent to those of the countries where they reside.

(8) Acts of ambassador or minister, how far binding upon his country.

(9) Diplomatic, judicial, and commercial functions of consuls or commercial agents.

(10) Piracy, what it is and where punishable.

(11) Consular Regulations of the United States—copy of which (to be returned to the Department) will be supplied to each candidate upon application.

(12) Such other subject or subjects as the Board may deem important and appropriate in any particular case.

The examining Board is authorized to issue such notices and to make all such rules as they may deem necessary to accomplish the objects of this regulation, and immediately upon the conclusion of such examination will make to the Secretary of State a report in writing, stating whether in their judgment the candidate is or is not qualified for the particular position applied for, and if the decision is adverse to the candidate, also briefly summarizing the grounds of such decision.

RICHARD OLNEY,
Secretary of State.

September 23, 1895.

CIRCULAR TO APPLICANTS.

DEPARTMENT OF STATE,
Washington, ———, 189 .

SIR: In reply to your letter of ———, I would state that, under the Executive order of September 20, 1895, vacancies in consulates or commercial agencies the salary of which is not more than \$2,500 or less than \$1,000, or the official fees of which do not exceed the former or fall below the latter sum, will hereafter be filled by the appointment of either: (1) Persons holding positions under the Department of State; (2) persons having previously served under the Department; or (3) from among persons who, having furnished the customary evidence of character, responsibility, and capacity, and having been thereupon selected by the President for examination, have been found upon such examination to be qualified for the position.

Applications for offices falling within the above limits should be addressed to the Secretary of State, the name of the vacancy applied for being indicated, as well as the special qualifications for such office of the applicant, and this application should be accompanied by such endorsements as to applicant's character, responsibility, and capacity as he may be able to furnish.

When the President shall have decided to fill any vacancy occurring among the consular offices in the above-mentioned classes, such candidates for it belonging to the third class as shall have been selected by him after examination of their applications and endorsements will be notified of the date of the examination, and of the subjects on which said examination will bear, and they will also be supplied with such other papers as the examining board shall deem necessary for their guidance.

I am, sir, your obedient servant,

W. W. ROCKHILL,
Third Assistant Secretary.

COMMERCE AND INDUSTRIES OF JAPAN.*

For the year 1894, Japan's foreign commerce reached the sum of \$230,000,000 (an excess over 1894 of about 30 per cent), of which foreign merchants residents of Japan participated to the amount of \$174,000,000 and Japanese merchants to the amount of \$56,000,000.

Tea.—Exports of tea from Yokohama exceeded those of the previous year by about 1,000,000 pounds, while shipments from Kōbe showed an excess of 500,000 pounds. Sales commenced April 20 or thereabouts, and important transactions were closed during May, June, and July, the quality of the crop being decidedly better than that of 1893. The outbreak of the Chino-Japanese war brought a further unexpected heavy demand from the United States and Canada, probably on account of the prevailing opinion in those countries that the war would prevent further shipments. The total exports reached \$7,930,287, as against \$7,702,088 in 1893, and the season of 1894 has proven the most profitable to shippers as well as natives for many years.

Ginseng.—Among the different plants cultivated by the Japanese farmer, the ginseng is of some importance. Its cultivation is, however, very laborious. The product is especially exported to Hongkong, China, and America, shipments amounting to \$499,798 in 1894, \$289,714 in 1893, and \$253,874 in 1892.

Peppermint.—Of late years, the cultivation of peppermint has increased, in consequence of the demand for peppermint oil and menthol crystals. Germany has been the principal buyer of these products. Exports were as follows in 1894, 1893, and 1892: Peppermint oil, \$242,769, \$121,686, and \$38,206; menthol crystals, \$143,107, \$54,866, and \$56,231.

Tobacco.—The cultivation of tobacco extends throughout the country. Its total consumption by natives is unknown, but must be enormous, taking into consideration that not men alone, but women also, are great smokers. The tobacco has a light yellow color and a sweet taste and flavor. In 1893, England was the only foreign tobacco buyer; since 1894, however, Hongkong and America have also entered the field. This product is very cheap. Exports footed up \$259,675 in 1894, \$65,768 in 1893, and \$95,816 in 1892.

Rice.—The most important farm product in Japan is rice. More than half of the cultivated lands are planted in rice, and the value of the crop is over half of the entire annual Japanese agricultural production. Most of the rice is grown in damp lands, and its cultivation is most trying. The last crop returns obtainable were as follows: In 1893, about 185,000,000 bushels; in 1892, about 207,000,000 bushels.

Exports of rice became important only in recent years. Imports, as was the case last year, were heavier than exports at certain times; on the other

* Translated from the report of the Swiss consul in Japan by Consul Germain, of Zurich, and transmitted to the Department of State June 14, 1895.

hand, the imports of beans, pease, etc., decreased in 1894 in the same proportion. Exports of rice amounted to \$5,593,192 in 1894, as against \$5,000,000 in 1893, and \$4,000,000 in 1892. The successful cultivation of rice is of vital importance to the Japanese. An unfavorable year is necessarily followed by famine, for there are millions of people in Japan producing rice which is their only food or source of revenue, and if the crop fails, they are without means to replace it.

Animals for food.—Although western civilization is making rapid progress, meat is but little used as food, and most of the young men eat meat only while in the military service. Oxen were formerly exclusively employed as heavy draft animals, and in recent years only, did they begin to slaughter them for food. To show how small the meat consumption is, it may be stated that, during 1894, only 20,316 neat cattle, 5,298 horses, 5,468 hogs, and 443 sheep were slaughtered for food purposes in Tokio, the capital, a city of 1,300,000 inhabitants. Foreigners, knowing of the abundance of beef in Europe, America, and Australia, are surprised to see the scarcity of such animals here. Sheep do not prosper in Japan, and the few hundreds which are annually slaughtered to supply foreigners are all imported from China.

Taxes.—For most farmers and landowners, rice is the product that provides them with the means to pay their taxes, etc. Taxes levied on Japanese farmers are very onerous. The real-estate tax, the principal burden of the Japanese taxpayer, falls principally on rice growers. It produced formerly 86 per cent of the total tax receipts, and still represents half of the ordinary Government resources. The real-estate tax is imposed on the stipulated gross earnings of the land. From 1870 on, it amounted to $21\frac{3}{4}$ per cent on the gross revenue, but can be raised at will to one-third of such revenue. This tax seems to be enormous; still it was much higher formerly—*i. e.*, one-half, and could be advanced to seven-tenths if found necessary. Last year the tax levy returned \$38,353,927 to the treasury.

There are but few articles free from taxation to the natives. In 1894, the liquor tax collected amounted to \$17,386,913, the tobacco tax to \$2,904,423, while the income tax brought in only \$1,287,535. Besides, there are a number of minor taxes resting all on the lower classes, foreigners being, as yet, exempt from taxation.

Paper.—It is a well-known fact that Japanese paper is the most suitable and best for fine typographical prints or engravings. It is very strong, and, therefore, especially adapted for the manufacture of all sorts of Japanese articles. The paper is made from the bast of several plants, the cultivation of which is very important to the agricultural interests of several districts, the more so because these plants grow on poor soil, unsuitable for other purposes. Three varieties of plants are principally used for the manufacture of paper, viz, the "Mitsumata," "Kozo," and "Gampi," and all kinds of thicknesses can be made. Among all the different kinds of paper, the following are specially worthy of mention: The rich imitations of leather for wall

paper, the tissue copying paper, and the heavy oil papers, which, to some extent, replace oilcloth. Besides these, the so-called "European paper" is made of cotton and old newspapers. Paper to the amount of 44,623,643 pounds for Japanese consumption was manufactured in 1892, which was valued at \$4,911,847. The article called "European paper" figured for 22,258,434 pounds, valued at \$969,549 (in 1891, \$850,791, and in 1890, \$403,410). Exports of all kinds of paper amounted to \$77,806, \$81,551, and \$55,302, in 1894, 1893, and 1892, respectively. The principal paper buyers are Americans and English, credited with buying \$30,000 and \$25,000 worth, respectively, with France and Germany next.

Fish oil.—Exports of this article increase every year, and amounted to \$665,807, \$530,304, and \$258,621 in 1894, 1893, and 1892. The heaviest buyers are the Germans, who are credited with purchases amounting to \$253,476, with the English and French next.

Cotton mills.—Hemp was formerly the most important product used for spinning purposes. To-day, it is still used for the manufacture of cordage and textiles, but does not cut a figure in the Japanese exports. Of late years, hemp has been gradually replaced by cotton, the culture of which is of great importance in many districts. Textile industries are rapidly developing in Japan. At the end of 1894, 47 mills, with 488,133 spindles, were in operation. The Manchester Guardian, in its issue of June 9, 1894, says that manufacturers of cotton textiles in India can no longer compete with Japan, as 4,000 Japanese spindles will produce the same quantity as 10,000 Indian. Around the industrial center of Osaka, there are cotton mills in almost every village, and exports of Japanese fabrics were first made from that city. There being no protection to foreign machinery against patent infringements, the Japanese imitate quickly all European novelties and improvements, and hence work under favorable conditions. Labor is so cheap that even Europe can no longer compete. Good cotton undershirts are being sold at 84 to 90 cents per dozen. Cotton umbrellas, on iron sticks—an important export article of Osaka—are sold at \$2.60 to \$3 per dozen, and the total exports of umbrellas in 1894 footed up \$746,067, as against \$589,272 for 1893.

Hemp and cotton carpets.—This industry is a new one, and has its seat in the city of Osaka. These carpets, called by foreigners Osaka carpets, are cheap, but not durable. All kinds of patterns imaginable, as well as every length and width, are manufactured. While two years ago the Japanese taste prevailed, to-day fine imitations of Turkish and Egyptian carpets can be found on the market. These carpets are all made by children, and in the low, gloomy rooms of the Japanese houses, troops of little boys and girls are working at this dusty trade with the zeal and intelligence of grown people. The little ones, who can be seen at work in a tropical heat, almost nude, seem to be in good health. These children's pay varies, according to their efficiency, at from 3 to 10 cents per day. The principal buyers are Americans, who purchased \$927,000 worth during 1894, out of a total

export of 546,091 pieces, worth \$1,134,072, in that year, against 203,050 pieces, worth \$391,989, in 1893, and 112,279 pieces, worth \$177,445, in 1892.

Matches.—Of late years, the manufacture of Japanese matches has attained large dimensions, owing to the very low prices at which they are sold. Hongkong, British India, China, and Korea are using them almost exclusively. Last year's statistics show the surprising fact that Japanese matches were exported to points and in value as follows: To Australia, \$25,407; Austria, \$2,345; North America, \$1,300. The total export value of these matches was \$3,795,634 in 1894, \$3,537,974 in 1893, and \$2,202,041 in 1892.

INCREASE OF JAPAN'S IMPORT TRADE.*

Imports all along the line show noticeable improvements, principally in raw cotton, gray shirtings, cotton yarns, iron, machinery, sugar, rice, muslins, etc., while flannels were neglected. Imports of foreign products increased from \$88,000,000 in 1893 to \$117,000,000 in 1894, or by \$29,000,000, the United States and England being the beneficiaries. Imports from America increased from \$6,000,000 to \$11,000,000.

There will, in all probability, be no decrease in the general amount of imports, but it is expected that less of manufactured articles will be imported, and that imports of raw products, such as wool, cotton, etc., also machinery, will greatly increase. Japanese manufacturers will avail themselves of the excessively low price of silver, low wages, and the anticipated advance in import duties to greatly improve their industries, and a boom is looked for at the end of the present conflict.

Watch industry.—The total import of watches during the year 1894 shows a decrease of about 24½ per cent in the number of pieces and about 29½ per cent in value as against 1893. The figures are: Total imports in 1893, 103,747 pieces, worth about \$523,126; in 1894, 78,272 pieces, worth about \$404,645; decrease for 1894, 25,475 pieces, or \$118,481.

The following countries participated in the above business:

Countries.	1893.	1894.	Value in 1894.
	<i>Pieces.</i>	<i>Pieces.</i>	
Switzerland.....	86,713	60,266	\$351,847
Germany.....	3,694	11,694	12,637
France	10,243	3,238	15,692
United States.....	2,406	2,972	23,728
England.....	691	102	741
Total.....	103,747	78,272	404,645

* Extracts from the report of the Swiss consul in Japan, translated by Consul Germain, of Zurich, and transmitted to the Department of State June 25, 1895.

These figures are taken from the official statistics, but must be wrong as far as Germany is concerned, for it is impossible that 11,694 watches should be worth only \$12,637. It is supposed that a large number of very cheap alarm clocks, worth about \$1.20 each, erroneously crept into the column of watches. In addition to watches, \$28,570 worth of parts of watches were imported in 1894, of which \$13,425 came from the United States and \$11,972 from Switzerland. During the previous year, imports of parts of watches amounted to \$9,077, and were supplied by Switzerland alone. The imports from America were made by the Osaka Watch Company, a Japanese stock company at Osaka, established there last year. This concern had bought of an American company—the Japan Watch Company (limited)—\$300,000 worth of old machinery for the manufacture of watches, at which work will commence on or about June, 1895; meanwhile the manager and two foremen are teaching thirty Japanese operatives how to manufacture the different parts of watches. Machinery therefor has been ordered in the United States, and will arrive in June, and therewith seven or eight American foremen. The original project was to import cases from America, and an order had already been given to a New York firm, but the prices were so high that the company concluded to manufacture the gold, silver, and other metallic cases themselves. The cost of watches, it is expected, will be unusually high at first, but it is difficult as yet to judge of the probable general results.

Clocks.—Imports of clocks from America were very large some years ago, but of late have declined in consequence of the sharp German competition. The following shows the Japanese imports in 1892, 1893, and 1894:

From—	1892.	1893.	1894.
	<i>Pieces.</i>	<i>Pieces.</i>	<i>Pieces.</i>
America.....	50,290	37,108	12,177
Germany.....	43,626	39,018	79,643
England.....	5,953	2,335	50

German clocks, most of the round alarm-clock shape, are very cheap, and are sold at retail at from \$1.50 to \$2 and upward.

In addition to the Osaka Watch Company, there are about a dozen other watch factories in Japan, located at Tokio, Kobé, Nagoya, etc., which do not only supply Japan, but Chinese markets as well. Japanese clocks are sold at from \$2 to \$8, according to quality.

The prospects for the watch trade of 1895 are good, and it is expected that imports of cheap metallic-case watches will be enormous. Gold watches, owing to their high prices, are the least in demand, but a great many "double watches" are sold, which come almost exclusively from the United States.

HINTS FOR EXPORTERS TO JAPAN.

The Export Association of Saxony has published some suggestions for the sending of goods to Japan, in accordance with the experience of one well acquainted with the market. Believing that they will be of interest to American exporters, I give them herewith.

The matter of greatest importance is the "make-up" of the goods. Importance is almost always attributed by the English to this point. When textile fabrics are in question, it is recommended not to exhibit too large a collection of samples, which only weary the buyer, who will examine a small collection equally well. To every series, a large sample of full width is to be annexed, in order to give an exact idea of the quality of the goods. A clear and intelligent arrangement of the price list is highly necessary. Experienced men say that it is scarcely believable how negligent many firms are on this point. On German price lists, it is often not at all indicated whether the prices are for meters or yards, for a gross or a hundred, for a kilogram or a catty. Often, the German exporter presupposes that his consignee, who receives by the same mail perhaps a dozen different sorts of price lists, is thoroughly acquainted with every secret of that particular branch of manufacture. The consignee is often left in doubt as to the color, length, time of delivery, and on what terms the goods can be shipped. Many German manufacturers simply indicate the width thus: 3-4, 5-4, 4-4, etc., without stating whether Berlin or Flemish ells, or Paris aunes, etc., are meant. Often, the German price list ends with a different rate of discount, sometimes even with two or three different rates, without sufficient explanation of the terms attached to the same. In many cases, the price list itself is divided into several classes, each with a different rate of discount. Clearness is also necessary in this, so that every merchant, even when not perfectly familiar with the branch, will understand at once what the seller requires. A merchant who doubts whether he has really understood the manufacturer, will be the more unwilling to send orders to him from Japan, as an explanation by letter takes about three months to reach him. The English manufacturers quote their prices usually net, frequently "free on board in London."

The packing of the goods, too, is very often unsatisfactory. For the sake of economy or for want of knowledge, the most ordinary means of precaution are neglected, so that loss ensues either to the merchant or to the commission agent at the Japanese port. German goods packed in this manner are landed in a soiled or damaged condition, or become so on their further journey into the interior.

THEODORE M. STEPHAN,
Consul.

ANNABERG, *May 27, 1895.*

TRADE OF JAPAN IN 1894.

I have the honor to transmit herewith tables showing the foreign trade and navigation of Japan during the year 1894.

In these tables, the Japanese silver yen has been taken as equivalent to 50.8 cents, that being its mean value during said year.

The most noticeable changes in this trade in which we are interested are, in my opinion, the increase in the direct importation of raw cotton from the United States and the growing importation of American kerosene oil, the progress in the latter case being largely due to the establishment here, by the Standard Oil Company, of an energetic direct agency.

Total foreign trade of Japan by countries during the year 1894.

Countries.	Exports.	Imports.
United States.....	\$22,008,366.99	\$5,579,139.69
Canada and British America.....	1,123,536.77	23,060.57
Peru.....		220.12
Great Britain.....	3,022,700.55	21,432,455.80
France.....	9,905,378.32	2,208,808.19
Germany.....	770,914.84	4,018,047.44
Italy.....	1,473,397.93	86,532.63
Switzerland.....	357,134.67	319,637.46
Belgium.....	9,895.63	610,169.36
Austria.....	236,314.77	10,068.41
Holland.....	69,530.62	15,328.28
Spain.....	26,572.01	22,079.38
Russia.....	14,017.90	4,301.81
Turkey.....	8,506.18	1,750.69
Sweden and Norway.....	292.60	9,460.65
Denmark.....	571.70	1,971.93
Portugal.....		2,199.15
China.....	4,477,505.59	8,895,845.39
Hongkong.....	8,229,336.21	4,571,856.80
British India.....	1,873,584.72	5,364,707.74
Anam and other French India.....	12,457.67	3,151,706.66
Korea.....	1,201,476.68	1,109,123.10
Russian Asia.....	504,319.38	591,975.52
Philippine Islands.....	112,058.11	862,999.89
Siam.....	1,500.32	314,380.45
Australia.....	557,817.42	271,659.78
Hawaii.....	159,465.34	3,123.07
Other countries.....	1,372,358.84	198,223.41
Total.....	57,529,011.76	59,680,833.37

Value of imports by articles into Japan from all countries during the year ending December 31, 1894.

Articles.	Value.	Articles.	Value
Animals.....	\$14,721.08	Boilers and engines and parts of.....	\$109,298.76
Arms and munitions of war.....	108,336.95	Bones.....	43,655.94
Atlases, maps, and charts.....	3,186.65	Books.....	54,907.43
Beverages.....	7,770.91	Boots and shoes.....	5,504.36

Value of imports by articles into Japan from all countries, etc.—Continued.

Articles.	Value.	Articles.	Value.
Braces and suspenders.....	\$3,513.08	Drugs, chemicals, etc.—Continued.	
Buttons.....	14,249.23	Musk.....	\$22,414.25
Candles.....	35,852.74	Phosphorus, amorphous.....	90,541.79
Canvas.....	46,568.30	Potash—	
Carpets.....	32,112.84	Bromide of.....	25,221.14
Carriages and parts of.....	16,537.46	Chlorate of.....	427,045.31
Carts and drays.....	12,965.53	Iodine of.....	6,366.28
Cement.....	25,928.28	Quinine.....	41,565.69
Chalk and clay.....	1,382.31	Rhubarb root.....	10,691.95
Clocks.....	54,754.56	Saffron.....	7,499.17
Parts of.....	51,844.27	Saltpeter.....	69,564.71
Clothing and apparel, sundry.....	35,692.24	Santonin.....	10,004.22
Coal.....	240,160.60	Soda—	
Coke.....	11,623.18	Bicarbonate.....	41,023.00
Compasses, marine and field.....	1,366.08	Caustic.....	104,377.16
Coral, beads, etc.....	12,609.12	Drugs and medicines, sundry.....	491,096.18
Cordage.....	46,633.50	Dyes, paints, and colors:	
Corks.....	23,905.72	Alizarin.....	56,327.69
Curtains.....	1,940.35	Aniline.....	276,095.15
Cutlery.....	18,014.41	Blue.....	14,442.83
Cotton:		Indigo.....	167,565.60
Raw.....	9,704,792.87	Lacquer.....	44,475.91
On seeds.....	257,473.47	Lead, white and red.....	8,748.82
Yarn.....	4,052,501.79	Liquid gold.....	24,997.65
Thread.....	56,491.59	Logwood, extract of.....	154,356.24
Printed.....	265,022.09	Paint in oil.....	75,234.79
Drills.....	87,680.24	Safflower.....	8,129.55
Ducks.....	48,136.74	Smalt and cobalt.....	15,203.00
Satin.....	643,204.52	Turmeric.....	8,246.16
Velvets.....	355,676.52	Turpentine.....	4,251.62
Shirtings—		Ultramarine.....	5,797.60
Gray.....	1,490,997.03	Varnish.....	15,319.02
White.....	171,504.40	Vermilion.....	34,729.59
Figured.....	4,943.66	Sundry.....	92,903.23
Twilled.....	87,220.62	Elastic webbing.....	9,355.50
Dyed.....	56,603.69	Fire engines and parts of.....	19,429.57
T cloths.....	107,857.63	Fish manure.....	98,367.28
Turkey reds.....	114,444.93	Flax, hemp, and jute.....	273,265.88
Victoria lawns.....	42,695.43	Flax and hemp yarn.....	66,403.65
Other.....	58,925.49	Fowling pieces and fittings.....	4,800.35
Underware.....	9,072.43	Furs.....	81,061.59
Drugs, chemicals, etc:		Glass:	
Acid—		Window.....	124,934.57
Carbolic.....	23,423.77	Plate.....	34,725.20
Salicylic.....	98,388.08	Ware.....	20,747.03
Tartaric.....	6,019.70	Sundry.....	6,368.70
Alcohol.....	88,486.40	Gloves.....	10,417.97
Alum.....	19,654.18	Grindstones, etc.....	2,055.25
Bismuth, subnitrate of.....	53,123.11	Grain, etc:	
Camphor.....	18,735.87	Beans, pease, and pulse.....	1,512,719.68
Cassia.....	11,846.39	Rice.....	4,273,879.29
Cinchona.....	6,677.39	Sesame.....	35,931.08
Dynamite.....	69,853.19	Seeds.....	131,085.13
Gambier.....	5,350.87	Wheat.....	15,769.92
Ginseng.....	9,433.50	Other.....	1,716.20
Glue.....	5,475.46	Gunny bags.....	87,010.97
Glycerin.....	20,975.83	Hair, animal.....	14,295.00
Gum arabic.....	5,265.03	Handkerchiefs.....	103,649.99
Gunpowder.....	14,257.00	Hats and caps.....	32,906.22
Hops.....	13,566.04	Hides.....	200,605.23
Morphine.....	8,951.52	Hoofs.....	18,708.58

Value of imports by articles into Japan from all countries, etc.—Continued.

Articles.	Value.	Articles.	Value.
Horns	\$6,231.93	Metals—Continued.	
Implements :		Copper—	
Agricultural.....	870.05	Sheets	\$5,640.90
Carpenters, etc.....	17,268.99	Tubes.....	10,884.72
Instruments :		German silver.....	21,289.93
Chemical.....	5,118.43	Lead.....	90,239.95
Musical.....	17,501.42	Sheet.....	45,472.06
Photographic.....	24,890.66	Tea.....	84,451.40
Surgical.....	15,241.91	Mercury and quicksilver.....	64,790.73
Surveying.....	39,128.31	Nickel.....	20,040.94
Other scientific.....	30,546.90	Tin.....	90,966.74
India rubber :		Yellow metal.....	21,577.56
Raw and sheet.....	24,167.51	Zinc	34,020.85
Ware.....	72,852.40	Sheet	216,841.77
Jewelry.....	15,841.38	Old.....	19,768.10
Lamps and parts of.....	22,702.37	Other.....	121,935.33
Lard and tallow.....	8,055.70	Microscopes.....	7,479.83
Lead pencils.....	16,878.74	Mosquito netting.....	5,181.78
Leather :		Oakum.....	13,903.85
Sole.....	143,145.41	Opera and field glasses.....	8,079.02
Other.....	304,211.01	Oils :	
Ware.....	9,696.46	Castor.....	31,528.20
Linen, etc.....	24,141.64	Cocoanut.....	18,285.59
Locomotives and parts of.....	802,778.46	Kerosene.....	2,608,748.79
Machinery and dynamos and parts of..	114,906.13	Other.....	51,198.24
Mining.....	22,364.11	Cakes.....	417,675.24
Paper making and parts of.....	26,221.94	Cloth, etc.....	9,703.88
Printing and parts of.....	8,786.27	Packing mats.....	50,135.79
Sawing and parts of.....	6,388.93	Paper :	
Sewing and parts of.....	9,035.69	Printing.....	130,991.54
Spinning and parts of.....	1,452,027.10	Other.....	205,833.79
Weaving and parts of.....	45,344.84	Chinese.....	12,741.56
Other.....	449,385.40	Printing ink.....	11,152.76
Metals :		Provisions :	
Iron—		Butter.....	38,463.18
Pig.....	377,724.83	Cheese.....	6,414.88
Old.....	6,048.32	Coffee.....	11,460.46
Bar and rod.....	680,229.25	Condensed milk.....	84,055.12
Hoop.....	17,862.68	Confectionery	6,865.05
Galvanized.....	122,285.82	Eggs.....	28,508.33
Plates.....	369,183.37	Flour	326,100.27
Other.....	22,824.77	Fruit.....	5,646.22
Rails.....	614,276.34	Ham and bacon.....	8,857.14
Railway plates.....	447,957.12	Seaweed.....	6,160.88
Nails.....	677,979.95	Salted—	
Pipes and tubes.....	245,915.89	Fish.....	32,104.41
Bolts, nuts, and screws.....	34,159.55	Meat.....	14,145.78
Wire :		Tea.....	6,143.30
Telegraph, etc.....	115,329.50	Other.....	318,091.85
Rope.....	5,564.65	Pumps and parts of.....	39,383.94
Ware, sundry.....	339,546.02	Railway carriages and parts of.....	78,791.03
Tin plates.....	179,158.67	Rattans.....	29,445.86
Anchors and cables.....	14,629.79	Scales and balances.....	5,753.21
Steel.....	184,081.85	Silk :	
Wire.....	5,676.74	Raw, cocoons, and floss.....	83,076.84
Rope	45,251.79	Crepe.....	5,789.66
Ware.....	96,633.55	Pongees.....	12,926.66
Umbrella frames.....	54,494.17	Satins.....	24,989.64
Brass.....	17,185.06	Other piece goods.....	12,930.40
Tubes.....	17,774.97	Other	6,290.73
Capsules.....	8,123.87	Silk and cotton mixtures.....	129,636.57

Value of imports by articles into Japan from all countries, etc.—Continued.

Articles.	Value.	Articles.	Value.
Skins.....	\$13,344.60	Wines, liquors, etc.....	\$261,794.10
Soap, washing and toilet.....	15,843.95	Wool.....	288,136.19
Socks and stockings.....	5,833.37	Yarn.....	286,258.70
Stationery, sundry.....	23,287.35	Blankets.....	290,986.53
Sugar :		Bunting	14,081.16
Brown.....	2,312,338.92	Flannels.....	156,887.56
White.....	4,414,392.00	Italian cloths.....	893,976.19
Lump.....	9,134.81	Long ells.....	11,816.75
Molasses.....	32,991.24	Mousseline de laine.....	1,600,618.17
Teeth, animal	38,887.39	Serges.....	22,067.68
Textile fabrics, sundry, etc.....	108,876.46	Woolen :	
Threads and twines.....	9,703.87	Cloths.....	325,765.19
Timber and wood.....	38,429.23	Part wool.....	89,183.98
Tobacco :		Piece goods.....	9,052.01
Cut and other.....	34,836.34	Traveling rugs.....	5,839.33
Cigars.....	39,580.11	Other	25,906.37
Cigarettes.....	118,030.58	Woolen and cotton mixtures.....	42,720.63
Tortoise shell.....	23,399.30	Miscellaneous.....	633,362.76
Trimmings.....	37,396.41	Total.....	59,624,651.60
Vessels, steam.....	4,166,895.09	Reimports.....	56,181.77
Wax, paraffin.....	133,611.65	Grand total.....	59,680,833.37
Watches.....	205,566.28		
Parts of.....	14,513.69		

Value of exports by articles from Japan to all countries during the year ending December 31, 1894.

Articles.	Value.	Articles.	Value.
Bamboo	\$95,993.51	Drugs, etc.—Continued.	
Ware.....	151,508.85	Ginseng.....	\$253,897.42
Beverages :		Menthol.....	72,698.48
Beer and liquors.....	31,798.61	Peony bark.....	6,464.70
Sake	94,539.42	Peppermint oil.....	123,326.78
Other.....	1,389.67	Star anise.....	17,983.37
Books.....	12,075.89	Sulphur.....	124,227.47
Boots and shoes.....	7,103.38	Sulphuric acid.....	19,547.97
Bulbs	34,657.75	Other	54,223.84
Carpets, hemp, and cotton.....	576,108.93	Fans.....	174,277.66
Charcoal	40,063.85	Feathers	38,652.10
Coal	3,341,858.13	Fish :	
Coke.....	3,943.40	Cuttle.....	590,526.13
Coral.....	24,398.46	Salmon and cod.....	33,589.33
Cotton :		Dried, etc.....	28,980.96
Gin.....	50,037.68	Sharks' fins.....	51,925.41
Raw	60,530.06	Shell.....	337,727.79
Yarn.....	485,409.22	Bêche de mer.	149,516.51
Flannel.....	112,734.13	Shrimps.....	87,264.61
Crepe.....	542,327.06	Furniture.....	51,923.74
Underwear.....	67,842.10	Furs	56,587.59
Piece goods.....	290,429.92	Glassware	131,550.06
Socks.....	22,989.47	Grain, etc. :	
Other manufactured.....	181,908.24	Barley.....	5,221.16
Drugs, etc. :		Beans, pease, etc.....	6,529.24
Camphor.....	520,169.83	Rape seed.....	1,147.66
Oil.....	11,692.10	Rice	2,642,462.43
Cassia bark.....	1,747.53	Rye.....	21,713.52
China root.....	5,400.36	Wheat	28,415.13
Gallnuts.....	28,695.79	Hats and caps.....	25,307.87
Gentian.....	10,432.45	Ivory ware.....	49,929.24

Value of exports by articles from Japan to all countries, etc.—Continued.

Articles.	Value.	Articles.	Value.
Jinrikishas	\$34,718.50	Provisions—Continued.	
Lacquer ware.....	405,119.96	Mushrooms.....	\$291,343.74
Lanterns, paper.....	11,161.66	Potatoes.....	11,882.85
Leather.....	16,584.49	Other	171,881.05
Ware.....	15,328.26	Rags.....	144,738.95
Imitation paper.....	10,905.63	Salt.....	34,674.03
Manganese.....	100,995.67	Screens, paper and other	143,433.49
Matches.....	1,928,182.53	Seaweed	311,754.65
Mats (grass matting).....	998,470.50	Shells	33,950.82
Metals:		Silk:	
Antimony	129,164.82	Raw.....	19,991,403.06
Ware.....	36,761.97	Waste.....	1,631,046.35
Brass—		Cocoons.....	115,606.88
Wire.....	43,612.00	Floss.....	50,691.78
Ware.....	22,650.31	Crepe.....	15,497.28
Bronze	35,869.16	Habutai.....	3,685,275.01
Ware.....	93,318.45	Other piece goods.....	581,668.02
Copper—		Handkerchiefs.....	1,843,089.39
Ingots.....	914,113.02	Other manufactures.....	501,008.50
Slabs.....	587,178.39	Soap, washing and toilet.....	52,126.63
Wire	13,703.33	Straw braids, etc.....	387,851.71
Ware	1,058,878.27	Tortoise-shell ware.....	9,689.36
Gold and silver ware.....	5,448.78	Tea.....	4,028,585.76
Ironware.....	32,246.79	Timber and wood.....	140,117.58
Tin, lead, and zinc.....	2,489.77	Tobacco:	
Other	87,998.69	Leaf and cut.....	148,030.01
Oil:		Cigarettes.....	28,893.40
Fish.....	338,230.35	Umbrellas.....	394,240.43
Rape seed.....	9,515.37	Wax:	
Other	10,899.93	Bees'.....	4,473.42
Paper.....	171,853.94	Fish.....	1,145.46
Ware.....	154,328.07	Vegetable	285,564.40
Pictures.....	35,064.28	Wood.....	142,618.85
Plants and trees	12,011.57	Wooden ware.....	2,425.19
Porcelain ware.....	754,305.75	Miscellaneous.....	1,176,731.80
Provisions:		Total Japanese goods.....	56,982,957.14
Colle vegetable.....	251,777.70	Reexports (foreign goods).....	546,054.62
Flour.....	71,858.97	Grand total.....	57,529,011.76
Ginger	21,777.10		
Groundnuts.....	11,537.35		

Value of imports by articles from the United States into Japan during the year 1894.

Articles.	Value.	Articles.	Value.
Arms and munitions of war.....	\$22,933.37	Copper ware.....	\$2,816.26
Boilers and engines.....	25,978.43	Drugs, medicines, and chemicals.....	39,875.11
Bones	9,305.66	Dyes and varnish.....	3,561.12
Books.....	12,127.63	Fabrics, textile.....	3,061.68
Boots and shoes.....	3,468.79	Hoofs.....	15,850.70
Carriages and parts of.....	4,831.68	Implements and tools.....	6,311.09
Clocks.....	15,808.24	India rubber.....	3,124.79
Parts of.....	23,831.65	Ware	9,394.28
Cotton:		Instruments, scientific, etc.....	17,688.03
Raw.....	1,361,781.03	Iron:	
Drills.....	32,388.00	Pipes and tubes.....	9,796.55
Duck	47,263.24	Ware.....	16,565.49
Twilled.....	12,139.25	Lamps and parts of.....	5,617.82
Dyed	4,014.47	Lead pencils.....	3,963.61
Other	1,253.87	Locomotives and parts of.....	281,026.68

Value of imports by articles from the United States into Japan, etc.—Continued.

Articles.	Value.	Articles.	Value
Leather :		Railway material.....	\$13,781.04
Sole.....	\$119,533.39	Carriages and parts of.....	11,697.00
Other.....	80,450.60	Scales and balances.....	3,113.78
Machinery :		Stationery.....	2,010.01
Dynamos, etc.....	73,105.27	Steel ware.....	6,114.82
Paper making.....	9,525.94	Sugar, white, loaf, etc.....	121,194.73
Other.....	26,739.39	Timber, planks, etc.....	15,703.95
Mercury.....	10,834.37	Tobacco :	
Metal ware, sundry.....	11,650.48	Cut.....	25,667.51
Oil :		Cigars, etc.....	5,523.19
Kerosene.....	2,072,310.85	Cigarettes.....	91,133.05
Other.....	32,837.34	Wax, paraffin.....	106,325.50
Paints, in oil.....	5,794.68	Watches.....	12,054.08
Paper.....	2,213.84	Fittings.....	6,819.82
Printing inks.....	5,440.82	Wines and liquors.....	12,591.70
Provisions :		Wool and woolen goods.....	3,813.82
Butter.....	13,645.22	Miscellaneous.....	74,475.40
Cheese.....	3,232.14		
Condensed milk.....	45,546.64	Total.....	5,572,429.74
Flour.....	311,133.43	Reimports.....	6,709.95
Ham and bacon.....	4,084.43		
Salt meat.....	11,825.69	Grand total.....	5,579,139.69
Other.....	224,721.29		

Value of exports by articles to the United States from Japan during the year 1894.

Articles.	Value.	Articles.	Value.
Antimony.....	\$10,964.55	Oil—Continued.	
Ware.....	6,421.95	Rape seed.....	\$3,768.99
Books.....	1,089.39	Paper.....	34,298.50
Bronze ware.....	13,928.10	Ware.....	42,969.72
Bamboo.....	13,850.40	Pictures.....	7,865.85
Ware.....	37,005.69	Porcelain and earthenware.....	235,015.46
Camphor.....	148,782.65	Rags.....	142,965.63
Oil.....	7,205.48	Rice.....	279,046.49
Carpets.....	471,100.51	Screens.....	18,731.76
Cloisonné and shippo.....	12,141.05	Silk :	
Clothing and apparel, etc.....	21,254.66	Raw.....	11,408,333.00
Coal.....	34,052.76	Waste.....	9,524.97
Copper.....	7,513.63	Cocoons.....	40,274.87
Ware.....	6,130.95	Floss.....	34,061.40
Cotton :		Crepe.....	1,001.13
Crepe.....	50,509.78	Habutai.....	2,347,376.91
Piece goods.....	9,923.32	Piece goods.....	487,568.46
Fans.....	41,578.15	Handkerchiefs.....	984,993.02
Ginseng.....	7,324.46	Other, sundry.....	330,439.00
Ivory ware.....	6,681.10	Silk and cotton mixtures.....	19,601.29
Lacquer ware.....	28,198.34	Straw braid.....	140,046.33
Lily bulbs.....	9,860.51	Tea.....	3,188,001.50
Manganese.....	41,116.42	Wax, vegetable.....	22,050.82
Matting.....	894,058.31	Wood ware.....	9,130.93
Menthol crystals.....	14,145.24	Miscellaneous.....	195,682.12
Metal ware, sundry.....	15,727.82		
Mushrooms.....	6,566.46	Total.....	21,999,430.38
Oil :		Foreign goods.....	8,936.60
Fish.....	4,418.88		
Peppermint.....	95,131.23	Grand total.....	22,008,366.98

Imports and exports of specie and bullion during the year 1894.

Description.	Exports.	Imports.
Gold coin and bullion.....	\$1,801,946. 19	\$304,430. 80
Silver coin and bullion.....	15,662,642. 32	13,323,664. 80
Total.....	17,464,588. 51	13,628,095. 60

Nationality, number, and tonnage of merchant vessels entering the ports of Japan from foreign countries during the year 1894.

Nationality.	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
American.....	32	83,350	81	48,380	113	131,730
Japanese:						
Foreign models.....	319	277,385	61	10,052	380	287,437
Junks			448	9,482	448	9,482
Austrian.....	22	56,760			22	56,760
British.....	850	1,539,900	124	74,212	974	1,614,112
Chinese.....	3	2,733	1	32	4	2,765
Korean.....	4	1,694	5	313	9	2,007
Danish.....	2	1,184			2	1,184
Dutch.....	3	2,847			3	2,847
French.....	26	54,722			26	54,722
German.....	370	336,361	6	7,139	376	343,500
Norwegian.....	95	89,437			95	89,437
Russian.....	60	92,202	3	220	63	92,422
Spanish.....	2	1,376			2	1,376
Total.....	1,788	2,539,951	729	149,830	2,517	2,689,781

Nationality, number, and tonnage of merchant vessels engaged in Japanese coastwise trade which cleared from ports of Japan during the year 1894.

Nationality.	Steamers.		Sailing vessels.*		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Japanese*.....	365	387,844			365	387,844
American.....	38	99,234	11	19,390	49	118,624
Austrian.....	4	10,716			4	10,716
British.....	802	1,558,529	8	11,173	810	1,569,702
Chinese.....	1	761			1	761
Danish.....	1	592			1	592
Dutch.....	1	822			1	822
French.....	72	151,951			72	151,951
German.....	137	169,774	4	5,010	141	174,784
Norwegian.....	14	17,125			14	17,125
Russian.....	3	6,531			3	6,531
Spanish.....	1	688			1	688
Total.....	1,439	2,404,567	23	35,573	1,462	2,440,140

* The figures relate to the open ports only; statistics of other ports and of Japanese sailing vessels engaged in the coastwise trade are not accessible.

Customs duties collected by Japan during the year 1894.

On exports.....	\$1,126,523.37
On imports.....	1,781,302.21
Miscellaneous.....	79,734.69
Total.....	2,987,560.27

N. W. McIVOR,
Consul-General.

KANAGAWA, *April 13, 1895.*

TRADE OF CUBA WITH THE UNITED STATES.

I submit the following report upon the exports from and imports into Sagua la Grande for the year ending June 30, 1895:

EXPORTS.

In American vessels.....	\$1,241,187.19
In British vessels.....	2,397,215.20
In Spanish vessels.....	818,550.21
In German vessels.....	78,804.57
In Norwegian vessels.....	215,129.67
Total.....	4,750,886.84

The exports other than to the United States, if any, would not be worth reporting.

As will be seen, nearly three-fourths of the exports have been carried in British, Spanish, and other foreign bottoms. This is due principally to the fact that these are, with but few exceptions, "tramp" steamers, which, for several reasons, carry for less than American sailing vessels. They are chartered for the season or year, to load at two or more ports.

One potent reason for the scarcity of American as compared with foreign vessels in Cuban ports is the onerous port charges imposed by the Spanish officials, to say nothing of the unreasonable fines inflicted, such, for instance, as trivial as a clerical error in a ship's manifest.

I have made repeated efforts to relieve our vessels of these charges at the hands of custom-house and other officials, but have, so far, signally failed to enlist the cooperation of the vessels' masters. These are mostly sailing vessels, owned by from twenty to forty shareholders, with the master's interest, usually from one-tenth to one-twentieth, making his (the master's) share in these overcharges on a single vessel only from \$1 to \$3, which may in part account for his indifference. Yet, it does not keep him from complaining to his owners that United States consuls afford them no protection against overcharges. These sailing vessels, under their charter, usually have fifteen days to discharge and the same number in which to load cargo. This long delay in discharge and dispatch, with the excessive port fees exacted, leaves owners little or no profit, and they come to Cuban and other Spanish ports when they can not go elsewhere.

IMPORTS.

Coal	\$84,236
Lumber	14,812
Total	99,048

The above shows the imports in American bottoms only, as I have found it impossible to obtain the imports in other vessels. But since the revocation by Spain of the tariff treaty, together with the impoverished condition of the principal industry—sugar—the imports from the United States, with the exception of coal and lumber, with small cargoes of flour, have been insignificant, as compared with former years.* It is unfortunate that such a check has been put upon the importation of American flour into Cuba. Under existing requirements of Spain’s import duties on American products shipped direct to this island, flour is brought from Spain for \$1.50 per bag of 200 pounds, less cost, than it can be imported from the United States direct. Yet, I am informed by a reliable merchant here, that where a consumer feels that he can afford it he will invariably buy American flour, the grade being much superior. Even the bakers who have the trade of the better class use flour from the United States.

American flour could and should, in my judgment, be made the largest of the imports from the United States.

* Consul Barker fails to note that, as stated in CONSULAR REPORTS No. 175 (April, 1895), p. 562, the Spanish Cortes has passed and the Spanish Government has proclaimed a new law placing the United States in the second column of the Spanish tariff for Cuba and Puerto Rico, and admitting products of the United States into those islands at lower rates. Following is a translation of the royal decree promulgating the law as published in the Gaceta de Madrid of February 6, 1895 :

“The Government is authorized to apply to the products and manufactures of the United States which, coming from the ports of the United States, may be admitted into the ports of Cuba and Puerto Rico, the second tariff of the duties in force in them, in return for the United States applying their lowest duties to the products of the soil and of the industry of Cuba and Puerto Rico. This *modus vivendi* shall be in force until the conclusion of a permanent treaty between the two parties concerned, or until one of them announces, three months in advance, the day on which it wishes to put an end to it.”

The diplomatic correspondence leading up to this action of the Spanish Government was transmitted to Congress in a special message from the President, February 7, 1895, and was printed as Ex. Doc. No. 58, Fifty-third Congress, third session.

From the reports of Consul-General Williams, of Habana—see, also, CONSULAR REPORTS No. 175 (April, 1895), p. 556—it appears that the rates of duties on flour and other breadstuffs imported from the United States under the recent reciprocity treaty, up to the 28th of August, 1894, the date of the termination of said treaty, were as follows :

	[Spanish gold per 100 kilograms, 220.46 pounds.]	
Wheat.....		\$0.30
Flour.....		1.00
Corn.....		.25
Meal.....		.25

Besides, there was levied a wharfage charge of 25 cents per ton on the above articles, in favor of the board of Habana harbor works.

Since the above-stated date, on going into force of the tariff of the United States, and consequent termination of the reciprocity treaty between the United States and Spain for Cuba, flour and other breadstuffs of the United States became thereon subject to the highest and following duties of the Cuban tariff :

	[Spanish gold per 100 kilograms.]	
Wheat.....		\$3.95
Flour.....		4.75
Corn.....		3.95
Meal.....		4.75

But the rates under the second column of the Spanish tariff, which now applies to the United States, are, per 100 kilograms (220.46 pounds): Wheat, \$3.15; flour, \$4; corn, \$3.15; meal, \$4.

The insolvent condition in which the sugar growers have become involved renders the sale of machinery impossible, so that Cuba can take from the United States the prime necessities only, and it is to be hoped that such arrangements may be made as will enable this island to purchase these from her logical market—the United States.

WALTER B. BARKER,
Consul.

SAGUA LA GRANDE, July 15, 1895.

FRANCO-SWISS COMMERCIAL RELATIONS.*

On or about the middle of November, 1894, the French ambassador at Berne informed the Swiss federal council that his Government was inclined to seek a basis for a better commercial understanding between France and Switzerland. The Swiss federal council, after due consideration, intimated its willingness to enter into negotiations with the French Government, and to that end appointed National Councillor Dr. C. Cramer-Frey as its representative. The sessions began in December, 1894, and in June, 1895, an agreement was arrived at by which France would grant certain concessions on its minimum tariff, while Switzerland was to retain its general tariff without reductions for French imports. At the same time some other questions were to be settled concerning special treatment of imports from the French district of Gex, as well as the control of the forests situated on the line of the two countries.

The present understanding between the two countries is not a treaty, but only a *modus vivendi* based on the autonomous measures of the respective parliaments, valid for an indefinite period and subject to cancellation at any time upon notice.

The following table shows the percentage of reduction made on the rates of the French minimum tariff:

Articles.	French reduction.	Articles.	French reduction.
	<i>Per cent.</i>		<i>Per cent.</i>
Condensed milk.....	8	Watches :	
Cheese.....	20	Ordinary—	
Sawed woods.....	50	Gold.....	6
Extracts of coloring matter.....	25 to 33	Others.....	30 to 40
Sewing and embroidering silk, colored.....	25	Complicated.....	33 to 50
Cotton textiles :		Chronographs :	
Printed.....	About 15	Gold.....	33
Colored.....	15 to 18	Others.....	75
Knit goods :		Music boxes, small.....	45
Cotton and wool.....	50	Machines :	
Silk.....	20 to 40	Hydraulic.....	20
Silk piece goods :		For the manufacture of paper.....	11
Black.....	50	Dynamos	10 to 40
Colored.	40	Refrigerators.....	7
Cotton embroideries.....	30	Parts of electric machinery.....	20 to 53

* Translated from the "Sweizertsche Handelsmisblatt."

The total exports of these favored articles to France, as far as could be ascertained, amounted in 1890—that is, under the old tariff—to about 54,000,000 francs (\$10,800,000), or about 44 per cent of the total Swiss exports to France. In 1894—that is, during the tariff war—it fell to about 26,500,000 francs (\$5,300,000), or about 37 per cent of the total exports.

In the proposed arrangement of 1892, which, however, fell through, there were a number of concessions, which this time were rejected by the French Government, as, for instance, on cattle, fresh milk, wood pulp, aluminium alloys, electric lamps, cotton yarns and ribbons, machines of several descriptions, etc. The total exports of these articles to France amounted to about 3,000,000 francs (\$579,000) in 1890, and in 1894, under the general tariff, to about 2,200,000 francs (\$424,600). The French Government wanted, under all circumstances, to forestall a rejection by Parliament, and decided to enter into an agreement only provided such concessions were made as were most likely to be approved by the French Chamber of Deputies. Although these terms were not satisfactory to Switzerland, it went at least to show that the French Government was in earnest in trying to arrive at some understanding, and so the Swiss representative on his part endeavored to be as lenient as possible, preferring an agreement that did not satisfy him entirely to a continuance of the tariff war. It must be taken into due consideration that among those articles for which a reduction was refused there were a good many which France is importing in larger quantities from other countries than from Switzerland. These countries, coming under the most-favored-nation clause, would have enjoyed the benefit of the agreement with Switzerland, without being bound to allow France any concessions in return.

In spite of the reluctance of France in this respect, the Swiss representative has obtained noticeable concessions for printed cotton textiles and certain important specialties of machinery.

When, on the other hand, the Swiss Government acknowledged the necessity of renouncing certain desirable concessions, it at the same time refused to concede some reductions asked by France, and thereby protected Swiss industries in perfumes, gloves, watches, optical instruments, slate, lime, roman cement, fruit preserves, bottled wines, fine sweet oils, soap, woolen textiles, ready-made dress goods, and the so-called "Paris articles." The total imports of these articles from France amounted to about 15,000,000 francs (\$2,895,000) in 1890 and to about 5,300,000 francs (\$1,022,900) in 1894 under the exceptional Swiss tariff, which shows that France's loss was much greater than that of Switzerland, Switzerland's exports having decreased only from 15,000,000 francs (\$2,895,000) to about 11,000,000 francs (\$2,123,000). If the Swiss Government agreed to enter into the present understanding, which is but partly satisfactory, it was guided by the suggestions of interested Swiss parties, by the advice of experts in the different lines, and especially by the investigations made by the Swiss Commercial and Industrial Association.

Let us consider the influence of the different tariffs on the principal articles:

Cheese.—The Swiss exports of cheese to France have not decreased as much as had been expected, although the French customs duties were 15 francs (\$2.89½) in 1892 and 25 francs (\$4.82½) in 1893, in lieu of the former rate of 4 francs (77.2 cents) per 100 kilograms (220.46 pounds). Exports of Swiss cheese amounted to 6,516 tons of 2,204 pounds each in 1890, 6,482 tons in 1891, 6,654 tons in 1892, 5,342 tons in 1893, and 5,811 tons in 1894. These figures do not show, as might seem to be the case, that the high duty of 25 francs (\$4.82½) per 100 kilograms (220.46 pounds) was not of importance; but the stability in the exports is principally due to the fact that, owing to the failure of forage crops of the preceding two years, the French production of cheese was small and France was compelled to import in spite of the high tariff. The duty of 12 francs (\$2.316) per 220.46 pounds established by the new agreement can therefore be regarded as advantageous to Swiss agriculture.

The duties on cheese are as follows in the principal states importing the Swiss product:

Countries.	Duty per 220 pounds.	Imports from Switzerland.	
		1890.	1894.
		Tons.	Tons.
France.....	\$2.40	6,516	5,811
Italy.....	2.20	6,148	4,948
Germany.....	3.75	5,164	4,620
Austria-Hungary.....	2.50	1,281	1,382
United States.....	8.80	2,124	2,269
Belgium.....	2.40	662	492
Russia.....	26.40	246	471
England.....	Free.	221	323

Condensed milk.—Another concession to the Swiss agricultural interests was made on condensed milk. Exports in 1890 amounted to 334 tons, worth \$1,068,668; in 1894, 362 tons, including sterilized milk.

Silk piece goods.—These were, against all expectations, one of the principal stumbling blocks to the understanding. While the Chamber of Commerce of Lyons, a body representing the majority of the Lyons silk manufacturers, had always been opposed to a protective customs duty on silks and looked favorably upon free trade, a growing opposition manifested itself during the negotiations upon the part of a number of such manufacturers who, during the tariff war, had begun to manufacture certain Swiss specialties; hence they protested against any tariff reduction, and, assisted by their workmen, petitioned the French Government to that effect. But the Swiss Government was successful in obtaining a reduction from 400 francs (\$77.20) to 200 francs (\$39.60) for black and 240 francs (\$47.32) for colored silks, the present duties representing 3 and 5 per cent ad valorem. Under the influence

of the minimum, and later on of the general, tariff, Swiss exports of pure silk goods to France decreased from 362 tons in 1890 to 95 tons in 1893. In 1894, 100 tons, worth about \$1,600,000, were exported. It is at least expected that the exports of Swiss colored silk goods will increase, while black silks will always meet with difficulties, because black silks are usually heavily chemically charged by dyers, and the duty being levied on the weight, competition will be difficult. The following are the duties levied now by the principal Swiss silk-purchasing states or countries :

Countries.	Duty per 220 pounds.	Imports from Swit- zerland.	
		1890.	1894.
		Tons.	Tons.
France :			
Black	\$40	362	112
Colored	48		
England.....	Free.	317	507
United States.....	(*)	99	234
Germany.....	150	79	94
Austria-Hungary.....	100	25	47
Belgium.....	140	21	39
Turkey.....	(†)	11	16

* 45 and 50 per cent. † 8 per cent.

Printed cotton textiles.—The tariff on these articles in the principal states importing Swiss fabrics are as follows per 220 pounds:

Countries.	Duty.	Imports from Switzerland.	
		1890.	1894.
		Tons.	Tons.
Italy.....	\$29.38	412	203
France.....	\$37.00 to 41.80	167	69
Spain.....	74.00 to 80.00	77	8
Germany.....	30.00	61	18
Austria.....	30.00 to 40.00	120	79
	<i>Per cent.</i>		
Turkey (European and Asiatic).	8	357	295
Netherlands Indies.....	6	230	155
British Indies.....	5	220	201

Embroideries.—These articles also encountered many difficulties toward an understanding. The concessions granted by France amount to a total reduction in the minimum tariff of 30 per cent. The new tariff is about \$150 on an average, and makes about 19 per cent ad valorem on the exports of 1890.

Machinery.—The concessions made by France apply to hydraulic and dynamo-electric machines, paper machines, and refrigerators. In spite of the tariff war, Swiss exports of machines to France have rather increased than decreased, because, in consequence of the increased duties, French

manufacturers needed an increased number of textile machines and motors. Exports to France were \$683,400, \$806,000, \$882,000, and \$720,000 during the years 1890, 1892, 1893, and 1894, respectively.

Sawed woods.—These will now pay the following rates in France, per ton of 2,204 pounds:

Description.	General tariff.	Minimum tariff.	
		Old.	New.
Sawed woods, common :			
80 millimeters (3.15 inches) thick and above.....	\$3.00	\$2.00	\$1.00
Between 35 and 80 millimeters (1.38 to 3.15 inches) thick.....	3.50	2.50	1.25
35 millimeters thick and under.....	5.00	3.50	1.75

The reductions agreed upon were adopted on July 8 by the French Chamber of Deputies, and on July 11 by the French Senate.

The Swiss Federal Assembly will now have to vote on the proposal of the Federal Government to withdraw the special tariff against France and treat that country as a most-favored nation. There is no doubt that the Swiss Federal Assembly will ratify the agreement, thus terminating a tariff war by which both countries, especially France, have suffered for four years.

EUGENE GERMAIN,
Consul.

ZURICH, *August 13, 1895.*

SHIPPING AND RAILWAY CHARGES AT BARRANQUILLA.

This consulate is in receipt of inquiries from intending shippers as to the amounts charged per ton by the railroad company for transshipping freight from Sabanilla to Barranquilla and *vice versa*, and asking for other general information, the object being to determine the amounts that could be saved by chartering vessels direct to Barranquilla.

Sailing vessels chartered for Barranquilla during the months of December, January, February, and March (the windy season) would do well to proceed to Santa Marta and there telegraph for a pilot, as the entrance at the mouth of the Magdalena River is made easier from that direction during that period ; during the other eight months of the year a sailing vessel can pick up its pilot at Puerto Colombia (Sabanilla).

With the increased export trade to the United States from this port, I trust we may also have an increase of imports from the United States, and that American shipmasters will make some inquiry into the advantages to be derived by sending their vessels to Barranquilla.

PORT DUES AT BARRANQUILLA.

Light-house dues.—For the first 100 tons, \$5 ; for each additional ton, 3 cents.

Tonnage dues.—For each ton of cargo delivered, except ballast, stones, bricks, flagstones, and coal, \$1 ; ballast, each ton, 50 cents.

Government stamps.—For each permit, bill of lading, manifest, crew list, provision list, and dispatch, \$2.

The foregoing prices are in Colombian currency.*

Pilotage —A vessel requiring a pilot for Barranquilla, for entering the river, \$30 ; taking vessel out, \$20.

Commission.—Commission houses charge \$25 for doing ship's business. Pilotage and commission are in American gold.

Pier service and traffic.—The following is from a printed statement prepared by F. J. Cisneros; general agent of the direction and administration of the Barranquilla Railway and Pier Company, giving the regulations for pier and traffic at Sabanilla, the port of entry for Barranquilla :

Steamers mooring at Puerto Colombia pier will pay, for the first day of twenty-four hours, or any fraction of it, to commence from the time the vessel comes alongside, £7, or its equivalent in Colombian currency at current rate of exchange; for every hour after the first twenty-four hours, day or night (except during night or feast days when the steamer is not working, when no charge will be made), 12s., or its equivalent in Colombian currency at current rate of exchange. It is understood that the pier master will decide if a vessel lying alongside the wharf affects the efficient working of same, in which case he is authorized to order removal at once.

Sailing ships will pay, according to register, in English currency, or its equivalent in Colombian currency at current rate of exchange, as follows :

Register.	Rate.	Register.	Rate.
	£ s.		£ s.
Under 50 tons.....	0 10	550 and under 600 tons.....	3 5
Over 50 and under 100 tons.....	0 15	600 and under 650 tons.....	3 10
100 and under 150 tons.....	1 0	650 and under 700 tons.....	3 15
150 and under 200 tons.....	1 5	700 and under 750 tons.....	4 0
200 and under 250 tons.....	1 10	750 and under 800 tons.....	4 5
250 and under 300 tons.....	1 15	800 and under 850 tons.....	4 10
300 and under 350 tons.....	2 0	850 and under 900 tons.....	4 15
350 and under 400 tons.....	2 5	900 and under 950 tons.....	5 0
400 and under 450 tons.....	2 10	950 and under 1,000 tons.....	5 5
450 and under 500 tons.....	2 15	1,000 tons*.....	5 10
500 and under 550 tons.....	3 0		

* 5s. per day for each additional 50 tons.

Sailing vessels are bound to employ the steam winch, and to pay £1 (or its equivalent in Colombian currency) per day for use of same.

All vessels mooring at the pier shall pay the dues fixed by the railway company's tables.

Use of hand crane per day or part of day, \$2.50 (gold), or its equivalent in Colombian currency.

Vessels mooring on the northern side of the pier shall hold on to the buoys or to their own anchors to avoid striking against the pier.

With a northwest sea and wind, the railway company will not allow any vessel to moor at the pier; and should any be moored there, it shall in such case haul away and anchor at a distance of not less than 2,000 feet, when so ordered by the pier master.

* The Colombian dollar (peso) was worth 48.6 cents on July 1, 1895, according to United States Treasury valuations

Without the express permission of the pier master, no vessels shall be allowed to use chains to make fast to the pier.

Every vessel shall be responsible for any damage caused to the pier by rubbing against it, or other negligence, etc.

Captains must obey the instructions of the pier master when shifting, making fast to the buoys, or performing any movement as ordered, and are requested to give notice to the pier master previous to moving away.

As regards extra work, it is understood that the working day commences at 6 a. m. and terminates at 5 p. m.

Railway rates.—The following are the freight rates charged by the Barranquilla Railway and Pier Company on imports and exports from Puerto Colombia (or Sabanilla) to Barranquilla:

<i>Imports.</i>		Per ton.
Wire.....		\$4.70
Flour, lard, potatoes, and rice.....		6.38
Matches and dry goods.....		9.85
Petroleum.....		14.78
Powder.....		19.04
Beer.....		9.85

<i>Exports.</i>		Per ton.
Ivory nuts and fustic.....		\$4.20
Coffee.....		6.16
Hides.....		7.84
Rubber and cocoa.....		8.98
Hats.....		11.76

The rates given are in Colombian currency.

JOHN BIDLAKE,
Consul.

BARRANQUILLA, *July 22, 1895.*

CHINESE IN NICARAGUA.

I have the honor to inclose a copy of a decree prohibiting the landing of Chinese immigrants on the eastern coast of Nicaragua.

There were no Chinese on this coast prior to 1886. A few were brought into the country that year, and were given employment on a banana plantation near Bluefields. It was soon discovered by the planter responsible for their importation that as plantation hands they were inferior to the natives, and, since 1887, Chinese have not been employed at that kind of labor in this district.

The Chinese did not leave the country. Two opened small shops, and three engaged in gardening. The others found employment in the mines.

From time to time, others came to the district, and on March 1, 1895, the Chinese population of what is now known as the department of Zelaya was estimated to be 300. With the exception of one man, all lived north of the Rama River. The single exception came to San Juan del Norte in 1887,

where he has been employed as a house servant ever since. There are but two Chinese women and five children in the entire district.

Between March 1 and May 27 of the present year, one hundred and seventy-five Chinese landed at Bluefields. About twenty came from Costa Rica and the others from New Orleans. There are eleven Chinese stores in Bluefields, nine in Rama, and two in Pearl Lagoon. There are ten more in the mining districts of Zelaya. One man is said to be the owner of eleven of these stores. His sales are believed to aggregate not less than \$15,000 a month. Bluefields has a Chinese laundry and an eating house.

The Chinese gardeners have been very successful. Most of those in the district, however, are engaged in mining, and all the arrivals since last March settled in the mining district. As a rule, they work their own claims. The Chinese miners are industrious, and it costs them but little to live. They grow yams, and about all they buy to eat is rice. They do not become discouraged when the findings are small, and but very few of them have been known to leave Nicaragua.

The Chinese stores in the towns are well stocked, and a few of the merchants have become not only strong competitors of the white merchants in the sale of goods and provisions of all kinds, but also in the purchase of rubber, gold, and other productions of the country.

The belief prevalent in most other countries that the introduction of Chinese labor does not in the end benefit the country permitting it is entertained to some extent in Zelaya, but as about all the Chinese laborers in the district are engaged in working old mines abandoned by white laborers, the strong prejudice has never been apparent in this country that invariably manifests itself in countries in which Chinese labor is brought into direct competition with home labor.

It is not unlikely that the recent action of the local authorities regarding the Chinese is largely attributable to the success the Chinese merchants have met with in Nicaragua. It is true that the working of the mines by the Chinese does not materially add to the wealth and prosperity of the country. They construct neither buildings, highways, nor railways. They are satisfied with bare roofs. They are willing to work years for a few pounds of gold, and they have no use for modern machinery or improvements. Their wants are simple, and do not increase when their earnings increase. They patronize Chinese stores exclusively, and the gold found by Chinese miners, whether exchanged for supplies or retained by themselves, eventually goes to China.

On May 27, the steamship *Morgan*, of New Orleans, arrived at Bluefields with fifty-one Chinese on board. The master of the *Morgan* was notified that the Chinese would not be permitted to land. The agent of the steamship company protested, and he insisted that his company had not been fairly treated. He stated that it had never been intimated to him that the officials of Zelaya were unfavorable to Chinese immigration, and he contended that in all fairness the *Morgan* should be permitted to land her Chinese passengers, and that like permission should be given the steamship

Gussie, of the same line, which would arrive at Bluefields on June 3. Governor Duarte granted the permission asked for. The *Gussie* arrived at the expected time, but had no Chinese on board. The decree in question was made immediately after the arrival of the *Gussie*.

THOMAS O'HARA,
Consul.

SAN JUAN DEL NORTE, *June 22, 1895.*

DECREE.

Augustin Duarte, governor and intendant of the department Zelaya and general inspector of the Atlantic Coast of the Republic, in accordance with the special faculties in me vested and having at sight article 17 of the constitution, decree:

(1) To prohibit, from the publication of this, the landing of Chinese immigrants on the Atlantic Coast.

(2) The immigrants who disobey this decree shall be shipped back by the respective authority as soon as heard of.

(3) To fine with \$200 the employee who forfeits the above dispositions.

BLUEFIELDS, *June 4, 1895.*

BUSINESS OF THE SUEZ CANAL.

The report of the Suez Canal Company for 1894, which was presented to the shareholders at a meeting held late in July and has been published in Kuhlows's German Trade Review, shows the improvement that has taken place in trade.

The gross receipts of the company were \$15,390,230.60, which compares with \$14,764,906.80 in 1893, and if the revenue from the tramway from Port Said to Ismailia and the lands and water company are eliminated, it will be found that the actual receipts from the vessels that used the canal were \$650,800 higher than in the previous year. Nothing, perhaps, could give a better idea of the general condition of commerce than the results as shown in the year's working.

English trade with the far East, for instance, improved to the extent of more than \$15,000,000 last year, and the shipments of English coal exceeded those of the previous year by 251,000 tons. On the other hand, the exports of jute from India increased 60,240 tons; raw cotton, 7,799 tons; and wool, 3,787 tons. Again, the further improvement in Australia appears from the increases of 65,442 tons of wheat, 13,550 tons of wool, 12,808 tons of refrigerated meat, and 19,816 tons of tallow that were shipped from Australia to England.

A considerable trade in butter and fruit is also springing up with the colonies, and the exports of butter from the colony of Victoria alone reached 9,459,000 kilograms, with a value of about \$4,000,000, in 1894, while no

less than thirty-five companies were formed in New South Wales last year with the object of preparing butter, fruit, and meat for export.

Although the number of ships that passed through the canal in 1894 was less than in several previous years, the tonnage has only once been exceeded viz, in 1891, when it reached 8,698,777 tons. The net tonnage last year amounted to 8,039,175 tons.

It is satisfactory to note that the average time occupied by vessels in getting through the canal was nineteen hours and fifty-five minutes—a diminution of forty-nine minutes as compared with 1893, and this fact speaks well for the constant efforts of the management to accelerate and improve the passage. With the immense progress that has been made in the shipbuilding industry, and the vastly increased pace at which ships now travel, a proportionate strain has, of course, been placed on the resources of the canal company, and the following facts concerning the time occupied in transit between England and Australia and the East are not without interest:

In 1873, the transport of the mails to Australia took forty-eight days; in 1889, the average time was reduced to thirty-five and a half days; while it is now thirty-two days and nine hours. Letters from London to China were not delivered under forty-five and a half days in 1873, but in 1893, they were distributed in Shanghai twenty-nine days after their departure from England. The Bombay mails used to take twenty-three days from London, but at the end of March last one of the Peninsular and Oriental Company's ships made the journey from Bombay to London in twelve days.

These figures speak for themselves, and prove the extra work which must have devolved on the company in order to keep the canal in good order.

The council of administration expects important results from the conclusion of peace between China and Japan, and it also anticipates, rather prematurely, an increase of traffic from the opening up of Madagascar. No doubt the French expedition has already provided a certain addition to the receipts, but some are afraid it is a little early to talk of opening up to civilization this vast territory before any substantial victory has been obtained.

From the financial point of view, last year's results are highly satisfactory, for not only did the receipts increase as already mentioned, but the expenses were \$65,958.60 smaller. Taking the whole of the charges of every kind, including the interest and sinking fund on the bonds, the 5 per cent interest which is paid on the whole of the capital, and a sum of \$90,000 for renewals and improvements, we get a total of \$7,165,834.20, which, deducted from the gross revenue of \$15,390,230.60 leaves \$8,224,396.40. Out of this sum, the council recommended the placing of \$150,931.60 to reserve, thus bringing it up to \$1,150,931.60, and the wisdom of the course was not disputed at the meeting. Thus there remained for distribution among the shareholders \$8,073,464.60, and each share, in addition to the 5 per cent, which is first paid, will receive for 1894 a dividend of \$14.20. The gross yield on Suez Canal shares for last year consequently comes to \$19.20, or 18 per cent, or, after deducting the tax, to \$18 net. An important period

was reached in July, 1894, when the last of the fifty coupons that had been detached from the Khedive's shares in 1869 was paid. The security known as "delegations" has, therefore, been extinguished, and the whole of the shares held by the British Government are now in receipt of dividends. Since the holding of England amounts to 176,400 shares, the annual revenue therefrom, assuming the dividends to be maintained, will be upwards of \$3,150,000.

H. F. MERRITT,
Consul.

BARMEN, *July, 1895.*

NOTES.

A New Method of Making Metal Pipes.—Consul Monaghan, of Chemnitz, reports, June 16, that Laval, in Stockholm, has invented a machine for making pipes without the welded seam. The mandril inserted between two rotating rolls is fitted, at the point where the pipe is formed, with two opposite or adjacent right-angled or nearly right-angled corners, and the rolls are fitted to correspond. In this way, the form-giving parts of the rolls, when producing pipes of nearly the same thickness of material, can retain sufficient strength.

Monazite in Brazil.—Consul-General Townes, of Rio de Janeiro, reports, July 20, that in the year 1888 a party of Americans found a deposit of monazite sand near the seashore at the port of Caravellas, near Bahia. The deposit was apparently large and remarkably pure. They mined and shipped to New York several tons, which were sold at a good price, but they still have in New York about 40 tons, which they have held since 1888 for reason of no demand.

The consul-general was further advised that other parties mined and left at Bahia about 100 tons of the same for like reason, *i. e.*, no market. The mine is not now worked, although the monazite sand contains only about 3 per cent of thoria.

Messrs. Williamson & Co., of Bahia, may give information relative to the lot of 100 tons left there.

There are no other known mines of this mineral in Brazil.

Consul Jones, of Rio Grande do Sul, under date of July 17, reports that there are no monazite mines in that district, and that the mineral was not even known to the mining engineers and experts whom he consulted.

Samoa Trade.—The following statistics, covering the foreign trade of Samoa in 1894, were received at the Department from the German Embassy, under date of Washington, August 11, 1895:

Trade in Samoa in 1894 shows a large increase in imports and exports, especially in consequence of an unusually rich yield of copra. The value of the imports rose from \$330,193 to \$451,389. The value of the goods imported by the German firms was \$223,586, or about 50.95 per cent, while the value of those imported by British merchants was but 22.6 per cent, and that of those imported by citizens of the United States but 15 per cent.

The export trade for 1894 was also practically entirely in German hands. The value of the goods exported by German firms was \$263,930, or 98.66 per cent, and that of those exported by persons of other nationalities was \$3,580, or 1.34 per cent.

The amount paid by the Germans for the support of the government of the country and of the municipal government is on the same scale of the German interests in Samoa, which largely exceed those of all other nations as regards the value of imports and exports.

The amount of the import duties paid in 1894 was \$23,069.99, of which \$14,913.20 was paid by Germans. The amount of the export duties paid was \$4,447.18, of which \$4,384.60 was paid by Germans. Of the entire amount of customs duties, Germans paid 60 per cent, British subjects paid 10 per cent, and citizens of the United States paid 8.6 per cent.

Of the direct taxes, excluding those paid by the natives, 50 per cent were paid by the Germans alone.

Of the entire cost of the government of the country and of the municipal government, Germans paid 65.2 per cent, British subjects paid about 14 per cent, and citizens of the United States paid about 5 per cent.

Railway and Telegraph in Nicaragua.—Under date of August 3, Consul O'Hara, of San Juan del Norte, transmits the following clipping from the Bluefields Recorder, of July 27, relative to the construction of railway and telegraph lines between Managua and Rama:

Yesterday General Duarte left for Rama to assist General Reyes at the inauguration of the telegraph connecting that town with Managua and the entire world. The governor-intendant was accompanied by several officials and the band of the Bluefields orchestra.

The Government is to be congratulated on this achievement, which will become a red-letter day in the annals of the country. To be in contact, as it were, with the universe, is a fact so grandiose that its benefits to the country can not be overestimated.

Advices have been received from Managua to the effect that the railroad to connect that city with Rama will be taken in hand on the 1st of August next, and will be carried on with the utmost rapidity. This new railway, which will open up an immense and fertile stretch of country, will be 102 miles long. The funds to bring the work to a successful close have been subscribed, and there is every reason to believe that nothing fortuitous will occur to prevent the thorough and prompt execution of this enterprise, which reflects the greatest credit on the administration and is fraught with untold benefits for the territory which it will tap and open up to the commerce of the world. What with the telegraph hence to Rama, thus connecting us by this civilizing agency with the entire universe, and this railroad from the sister city to the capital of the Republic, it is palpably evident that this progressive Government is determined to endow the country with lasting works of general utility and mark its passage at the helm of affairs by means of those indelible signs which leave their imprint on the destiny of nations.

Cotton Caterpillar in Egypt.—Vice and Deputy Consul-General Horace Lee Washington reports, Cairo, July 24, as follows:

The recent ravages of the cotton caterpillar attracted such general attention that, at the last meeting of the council of ministers, a commission was appointed, to be assisted by a botanist, an entomologist, and a chemist, to investigate and determine practical means for the destruction of this worm, and the sum of £500 (\$2,433) was voted for the purpose. So far,

from experiments conducted by the College of Agriculture, results have only been obtained by the laborious picking and burning of all leaves on which eggs were deposited or young caterpillars found. If, after the foregoing operation, caterpillars were found on the leaves and on the ground, the cotton received a heavy watering over the tops of the drills and the plants were then well shaken. This must be done between 10 a. m. and 2 p. m., and any water remaining after six hours should be drained off. The cheapness of Egyptian labor enables the above method to be followed at a cost of about \$1.46 an acre.

Austro-American Steamship Communication.—Consul E. P. T. Hammond writes from Budapest, August 3, that it is reported from Trieste that the new Austro-American Steamship Line has registered four steamers, namely, the *Teregesta*, *Illyria*, *Istria*, and *Betty*, each having 4,000 tons capacity. These steamers will sail direct from England to New Orleans. The first steamer from New Orleans will arrive in Trieste about the end of October next.

German Coke in Australia.*—Consul Theodore M. Stephan, of Anna-berg, reports, under date of August 3, that the competition of Germany in the export of coke has new successes to record, as about a dozen large sailing vessels have been chartered to load German coke for Port Pirie, Australia. Antwerp, Rotterdam, and Hamburg have been decided upon as ~~places~~ of lading for these ships. German coke has found a ready sale of late years ~~on account~~ of its cheapness, chiefly in Spain and Belgium, where it came into competition with Durham coke, which has been almost exclusively used there. The Australian coke trade has, however, been almost entirely in the hands of the exporters of Durham, ~~as~~ coke of very good quality is required in Australia for the smelting of gold and silver. The Durham coke producers believed that they could remain without rivals ~~on the~~ Australian market on account of the quality of their product, but now find themselves deceived in this assumption. Should the shipments from Germany, which are now being tried, prove successful, the German export of coke will probably, in future, greatly increase, as Germany can, with her improved methods, produce large quantities of the fuel in question.

The Phylloxera in Italy.—Under date of August 2, Consul Eugene Germain, of Zurich, transmits the following statistics relative to the phylloxera in Italy:

From its first appearance in Italy, the phylloxera has totally ruined 114,338 hectares (282,529 acres) of vineyards, and 75,338 hectares (186,160 acres) are in course of destruction. Sicily has been and is still the greatest sufferer. The vineyards ruined in that island cover an area of 96,949 hectares (239,561 acres), and those yet diseased foot up 63,263 hectares (156,323 acres).

* See CONSULAR REPORTS No. 169 (October, 1894), p. 264, "Coke Manufacture in Germany."

An investigation made by the Italian Department of Agriculture shows that in consequence of the change made in the culture of agricultural products (substituting grain in lieu of vines) the wages paid to farm laborers have decreased by 16,927,000 lire (\$3,385,400), and the receipts from products show a shortage of 25,966,000 lire (\$5,193,200). The effects of the phylloxera can be seen over the whole island, with the exception of the southern part of the province of Trapani and some districts of the province of Palermo. The province of Sassari, in the sister island of Sardinia, is overrun to such an extent that no measures are being taken to fight it. The Italian Government restricts its measures to endeavoring to protect the province of Cagliari, which so far has been spared. In Calabria, the same circumstances are prevailing as in Sassari; preventative measures against the insect are only taken in a few districts around the limits of Apulia, Basilicata, and the province of Salerno, in order to save these localities from further destruction.

Central Italy has suffered less from the plague. The province of Rome is only slightly infected. The protective measures resorted to there show excellent results, and, in some parts, the evil seems to have been overcome. In Tuscany, also, good results are noticeable, but on the island of Elba protective measures have been suspended. Hopes are entertained in the Romagna that further destruction can be prevented and perhaps the insect extirpated entirely. Venetia and a part of Emilia have, up to date, been spared, while in Lombardy, and especially in the province of Bergamo, the disease is spreading, threatening the province of Brescia. Piedmont and Liguria have only a few affected vineyards, the first in the province of Cuneo and in a small portion of the province of Novara, in the province of Maurizio. It may be added that, in general, the phylloxera has spread more slowly in Italy than has been the case in other countries.

Gold Receipts at the Melbourne Mint.—Consul-General Maratta, under date of July 9, transmits the following return showing the quantity of gold received at the Melbourne (Victoria) mint during the quarter and half year ending June 30, 1895:

Where produced.	June quarter—		First six months—	
	1894.	1895.	1894.	1895.
	<i>Ounces.</i>	<i>Ounces.</i>	<i>Ounces.</i>	<i>Ounces.</i>
Victoria.....	185,377.26	186,716.03	360,139.26	360,550.11
New South Wales.....	54.25	102.48	100.15	173.13
New Zealand.....	7,285.30	3,571.39	24,156.41	13,660.09
Queensland		7.31	15.34	7.31
South Australia.....	10,274.48	10,620.43	16,741.38	24,060.75
Tasmania.....	11,301.48	9,642.17	20,750.50	28,628.62
West Australia.....	41,250.91	54,366.79	82,764.51	107,262.55
Madagascar.....			162.65	
Natal.....				8.26
Light gold coin.....	31.33	44.67	136.52	207.31
Unknown.....	1,650.54	1,924.81	5,321.93	3,386.57
Total.....	257,225.55	266,996.08	510,288.65	537,944.70

Newfoundland-American Trade.—Consul Sam Ryan, St. John's, August 20, reports:

Hitherto, the efforts of the small, but always alert and active, English element engaged in business and politics here has been assiduously devoted to diverting trade from the United

States and concentrating it as far as possible in England. Their efforts have, of course, been warmly seconded in England. Now that this element has been divided by an apparently irreconcilable conflict between some of the most prominent merchants, our people should take advantage of the situation to establish steam communication with the west coast of Newfoundland and to the port of St. John's.

German Iron for Japan.—Vice-Commercial Agent George H. Murphy, submits, under date of Luxemburg, July 30, the following translation from the *Luxemburger Zeitung* of the same date:

Among those interested in the iron industry of western Germany some anxiety is felt as to whether, in the question of the rearrangement of our commercial relations with Japan, a step forward has been taken or is likely to be taken. Our iron industry, which is still in a somewhat languishing condition, is inclined to hope that it will reap some advantage from vigorous action by the Government in this direction, although it realizes that perhaps this very facilitation of the sale of products of the German iron industry may enable the Japanese Empire very soon to produce at home, to a larger extent than is now the case, a number of articles which have heretofore been supplied by foreign countries.

Adulteration of Dyes and Colors in Germany.—Consul Theodore M. Stephan, Annaberg, May 27, reports that in the laboratory of the Association for the Promotion of Rational Decorative Art, in Munich, a large number of dyes and colors used in trade have been repeatedly analyzed, and, according to a published report, it appears that the materials for decorative and house painting particularly were adulterated in a most unscrupulous manner. Especially the genuine green and blue dyes and the green and blue ultramarine are displaced by imitation blues and greens and ultramarines to the disadvantage of the buyer. These substitutes, blue as well as green, consist frequently of clay or spar, and are brightened by small admixtures of aniline or tar colors. When exposed to the light, these colors disappear in the course of a few hours, whereas the genuine ultramarine dyes are quite unaffected by light or atmosphere.

Cuban Manganese Ore for the United States.—Consul Pulaski F. Hyatt, of Santiago de Cuba, August 23, reports that the Ponupo Mining Company, composed mostly of Pennsylvanians, organized under the laws of West Virginia, dispatched their first shipload of 600 tons of manganese ore to Philadelphia by the Norwegian steamer *Jactern*. This company recently completed a short railroad to connect with the Sabanilla and Maroto Railroad, which gives them rail facilities to Santiago Bay, and they now have a capacity of 200 tons per day, and the demand for their ore from the United States is far beyond their ability to supply. But, after making so propitious a start, the company have been compelled to shut down by the exigencies of war.

Two Spanish officers derive a tonnage royalty from these mines, which caused a body of insurrectionists to fire upon a train of workingmen, and caused such a stampede that the company have been unable to induce the miners to return to work, notwithstanding the insurgent General Maceo condemned the act and promised protection.

As manganese is a necessity in the manufacture of steel, and we are mostly dependent on a foreign supply, which comes now principally from the Black Sea region of Europe, it is greatly to be hoped that these near-by mines, controlled and operated by American citizens, will soon be able to resume operations.

Nova Scotia Iron and Steel.—Consul M. P. Pendleton, of Pictou, August 16, transmits the following clipping from the Halifax Chronicle of that date concerning the Nova Scotia Steel Company, which conducts the largest and most important business in iron and steel in Canada. The company's works are situated in New Glasgow, a thriving town of 4,000 or 5,000 inhabitants, only a short distance from the Pictou County coal fields.

The first annual meeting of the Nova Scotia Steel Company (limited) was held in New Glasgow on Wednesday, August 14. A half-yearly dividend of 4 per cent on the preferred stock was declared. The directors, in their report, say: "The extreme depression of the iron industry, particularly in the United States, during the past year had the effect of reducing prices so much below former years that profits were greatly decreased. Owing to the large accumulation of unsold pig iron and the necessity of a partial relining, the furnace was out of blast during five months of the year. The output of the steel works was largely curtailed during the month of July, 1894, owing to the "cogging" mill engines having broken down, involving a large loss through the stoppage of the works and cost of repairs. As to the future, prices have improved considerably during the past three months; orders for a large quantity of steel have been received. Pig iron during the past two months is being sold as fast as the blast furnace is producing it, and we enter the new year with very fair prospects."

Copyright in Denmark.—In a dispatch to the Department of State dated Copenhagen, August 28, 1895, Minister Risley informs the Department of the result of a recent investigation made by him, on behalf of an American citizen, concerning the copyright law of Denmark. The question was whether it was possible under the laws of that country for a citizen of the United States to obtain copyright there for a book written by him and printed and published in the United States. This question was addressed to the Director-General of Foreign Affairs, who replied that, according to the laws in force, the protection of a literary work published in the United States could not be secured in Denmark, the protection of literary property being subject to the condition common to foreigners and to Danes alike that the work must be published in Denmark to secure the protection of the copyright laws of that country. Mr. Risley adds that after examining the

laws of Denmark on the subject, he finds that the only condition of obtaining copyright is publication within the realm, no matter where the work was composed or printed.

Bluefields Light-House.—Consul Thomas O'Hara, San Juan del Norte, August 23, transmits the following clipping from the Recorder, of Bluefields, relative to the erection of a light-house at Bluefields. At present there is no light-house on the eastern coast of Nicaragua. The Government is not expected to appropriate anything toward the construction of the proposed light-house, and the cost of it would have to be borne by the local government of Zelaya.

We had the advantage of a conversation with Captain Falsen, of the steamer *John Wilson*, lately, in the course of which he pointed out the fact that had there been a light-house or some luminous beacon at the Bluff, he could have entered the port fully twelve hours earlier than he did on his last trip. Captain Falsen added that in the interest of navigation along this coast three light-houses, however primitive, were imperiously necessary, viz, one at the Bluff, another on Little Corn Island, and a third at Cape Gracias-a-Dios.

This question of light-houses has been under the consideration of the administration for some time past. Last April, during a visit to the Bluff, the then intendant, General R. Cabezas, went on board the steamer *South Portland*, Captain Dickman. During a conversation as to the best means of bettering the port, Captain Dickman pointed out to General Cabezas the necessity of a light-house at the Bluff. The intendant, in reply, informed Captain Dickman that he had asked for information on the subject from several prominent firms in the United States and Europe in view of obtaining the most improved apparatus, and that light-houses would be erected not only at the Bluff, but at Corn Island and the cape, which, according to the report of mariners trading on the coast, have become an indispensable necessity.

It is evident from what precedes that a move has been made in this matter, which we understand has been brought to the cognizance of the higher authorities. The time has come for practical action. A measure so important to trade and commerce should not be buried in administrative pigeonholes.

We have it on good authority that the difficulties in the way of shipowners to have vessels chartered for this port insured are daily becoming more frequent, and this because of the dangers besetting navigation on the coast through this want of light-houses.

Our Government is too progressive, too alive to our interest, not to be impressed with the advantages light-houses along the coast would procure to our commerce. They will not permit of Bluefields being banned by maritime underwriters for the lack of this illuminating agency, which can be set up at no extraordinary cost.

Certificates-of-Origin Shipments to Switzerland.—Consul Eugene Germain, Zurich, August 20, reports that a decree issued by the Swiss federal council on August 16, 1895, calls the attention of the mercantile world to the fact that from and after August 19, 1895, the time specified for the entering into force of the new commercial tariff agreement between France and Switzerland, merchandise shipments for Switzerland need no longer be accompanied by certificates, and all merchandise imports will be cleared thereafter without any such formality.

Tuxpan Light-House.—Consul John Drayton, under date of September 4, reports that the Mexican Government has erected a light-house at the entrance of the river at the port of Tuxpan which will be illuminated on the 16th of this month, and that another light-house is being constructed and will be placed on Lobos Island, which is about 30 miles north of Tuxpan and about 12 miles from the mainland.

Manchester Exports to the United States.—According to a report from Consul William F. Grinnell, of Manchester, dated September 5, the total declared exports to the United States for the years ending August 31, 1895, and August 31, 1894, being substantially the first year of the Wilson tariff and the last year of the so-called McKinley tariff, were as follows: Year ending August 31, 1895, \$13,067,318.97; year ending August 31, 1894, \$7,413,146.01; increase in 1895, \$5,654,172.96.

Misrepresentation of American Canned Goods.—In CONSULAR REPORTS for September (1895, p. 41), a report was printed from Consul Fowler, of Ningpo, calling attention to newspaper publications in China alleging gross carelessness in the preparation and packing of meat at Chicago for export, the evident object being to discredit canned goods from the United States. The matter was referred to the Department of Agriculture, which replies as follows:

Referring to that part of your letter of the 13th ultimo, concerning the efforts to discredit American canned meats and meat extracts in Chinese markets by newspaper publications, claiming that they are impure and contain the refuse of Chicago slaughterhouses, this Department had these statements investigated when they were first made in the London Times. It was found that they emanated from a discharged employee, and that most of the statements were absurd on the face of them. The abattoirs of Chicago are kept as clean as it is possible to keep such places, and the products are handled with great care. To prepare the products of these establishments in the manner alleged in the statement referred to would be to damage the goods without the prospect of a corresponding gain. The charges are evidently untrue.

Consular Reports Transmitted to Other Departments.—The following reports (originals or copies) were transmitted during the month of September to other Departments for publication or for proper action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
M. H. Twitchell, Kingston.....	Aug. 30, 1895	Agriculture.....	Department of Agriculture.
Chas. M. Caughy, Messina.....	Aug. 10, 1895	Prospects of the green-fruit crop.	Do.
Wm. H. Seymour, Palermo.....	Aug. 9, 1895	Oranges and lemons.....	Do.
Louis H. Brühl, Catania.....	Aug. 13, 1895	.....do	Do.
George H. Murphy, Luxemburg.	Aug. 23, 1895	Hog and cattle diseases.....	Do.
Edward Schneegans, Saigon	July 27, 1895	Rice.....	Do.
Edgar Whidden, St. Stephen...	Aug. 23, 1895	Crops.....	Do.

Consular Reports Reprinted Abroad.—The report of Consul-General Barrett, from Siam, on the “Market for Dairy Products and Fruits,” printed in the June (1895) number of CONSULAR REPORTS, p. 206, was reprinted in the Siam Observer of July 11, Siam Free Press of July 11, and the Hongkong Daily Press of July 23, 1895.

The British Board of Trade Journal for September, 1895, contains (p. 321) extracts from the report of Consul-General Karel, of St. Petersburg, on copper rolls for printing calicoes, published in CONSULAR REPORTS No. 178 (July, 1895), p. 475.

FOREIGN REPORTS AND PUBLICATIONS.

Exhibition of California Products at Berlin.*—The “Exhibition of California products” is made by more than a hundred of the largest manufacturing and export houses in the State of California, representing a capital of more than \$300,000,000.

The enterprise was initiated in October, 1894, by Mr. W. E. von Johannsen, who has been a resident of San Francisco for many years, and who has been in business there as an importer and exporter since 1892. After his arrival in Europe, he appointed the firm of Kloth, Schünemann & Co., of Hamburg, directors and managers of the department for the promotion of commerce, and that firm, with its branches at Berlin, Paris, and London, as well as through about four hundred agencies in all parts of Europe, represents the interests of the California firms interested.

In the first side section, at the entrance, is seen a magnificent arbor made of palm fronds; a bouquet of flowers hanging near it, informs us that the yellow poppy is the national flower of California. Here we see representations of great colonial enterprises, which give us some idea of the splendor of nature in California. Wonderfully fine beans, pease, lentils, nuts (some kinds of which are still unknown in Germany), almonds, barley, oats, indian corn, hops, chestnuts, and Californian borax are exhibited. One whole wall shows us the lovely town of Fresno, the pearl of California, in its whole extent. It is the center of the raisin trade, and 56,000,000 pounds of raisins were exported from there last year. On the opposite wall, we see views of Californian dwelling houses, built entirely of wood, which are palaces of their kind, and which have awakened great interest in architectural circles here. Next follow hydraulic gold-washing and the redwood industry of Humboldt County; here is seen the thick bark of trees measuring, in many cases, 40 feet in diameter. This bark has a great future for us, partly as a substitute for felt and partly for the manufacture of paper. In the center of this section, we see a bust of Emperor William II, and by its side one of Governor James H. Budd, of California.

In the next section we find a large assortment of all kinds of dried fruit—peaches, apricots, pears, nectarines, plums, figs, etc. What a future this industry has, and how well developed it already is, is shown by the fact that last year 42,000,000 pounds of dried plums and 126,000,000 pounds of other kinds of dried fruit were exported. In the center is an orange trophy, reminding us that California shipped more than 10,000 carloads of oranges last year, and on the opposite side is the exhibit of the largest canning

*Translated from the *Berliner Illustrirte Zeitung* of September 1, 1895; see, also, **CONSULAR REPORTS** No. 180 (September, 1895), p. 120.

establishments in the world, which, altogether, shipped about 30,000,000 cans of fruit preserves last year.

In the third and fourth sections, we find the California wine interests fully represented. The great variety—at least fifty—of the kinds, is astonishing. The fact that several of the wine exhibitors received gold medals at the international exhibitions of Paris, Dublin, and Genoa, speaks well for the excellence of their products.

But, as we see on going farther, California also furnishes large amounts of mineral waters. One company alone has a paid-up capital of 12,000,000 marks. The kinds resemble our apollinaris and seltzers, but one water called “Veronica”—resembling the Carlsbad—seems to have a great future before it.

The expression “California champagne” sounds strangely, but, as we must admit after trying it, it may be said to equal the best French champagne.

In the last section, there is a magnificent specimen of a Californian peacock, with its proud plumage, and around it are various apparatus used in the production of eggs and in the raising of poultry and cattle. The slate, marble, onyx, asbestos, olive oil, lithographic ink, chocolate, and a dozen other industries are also represented here.

The northern wonderland—Alaska—shows us its grand salmon industry through the exhibit of the various brands canned by two syndicates.

The halls of the exhibition are richly decorated by flags, tasteful ornaments in yellow (the national color of California), and Californian pines. A newspaper trophy which is erected in it, shows the newspapers published in California, which appear in a great variety of languages.

The exports of fruit from California to Germany in 1893 amounted to \$178,200, and rose in 1894 to \$341,900. The largest market for California products is London.

The price of admission is now 25 pfennigs, and from September 1 to 3, inclusive, each visitor receives a glass of California red wine gratis. All the entrance money is to be given to a Berlin charitable institution.

Collection of Commercial Information by the French Government.*—Mistaken ideas are long lived. Last year the budget committee welcomed a proposition toward opening a credit of 100,000 francs for the creation of a certain number of commercial attachés. These new officers would have been directed to study the economical and commercial conditions of the principal foreign countries, and to point out the resources that they could offer to our commerce or manufactures. The combination, accepted in principle by the commission, has been abandoned in consequence of the opposition of the Minister of Foreign Affairs. But the project, we are told, is not lost sight of by those who conceived it. It is announced that in the

* Translated from the *Journal des Debats*, Paris, August 2, 1895.

course of the next session; the Chamber will again take it up. Heaven knows however, if the need is felt for creating a new personnel for collecting commercial intelligence, for, if any of our systems is largely endowed, it is assuredly that one.

Let the following enumeration decide: In the first place, we have our consuls, whose most important duty consists in keeping the Government informed of the commercial, economical, and financial resources of the countries where they are stationed permanently. It may be that all the members of the consular corps do not perform their tasks with the competency, zeal, and intelligence to be desired; but it is not less true that some of them render very good service. At all events, if it were shown that agents trained to the business residing for long years abroad are incapable of giving precise information and of practical use, we can not see why new officers recruited more or less arbitrarily would furnish more.

But to pursue our investigations. At the Ministry of Commerce, there exists a director whose chief duty consists in collecting commercial intelligence and publishing it in the "*Annales du Commerce Extérieur*" (Annals of Foreign Commerce), in the "*Moniteur Officiel*" (Official Monitor), and in the collection of consular reports. The administration of the colonies, also, has desired to have a system (service) of commercial information. It is the finest jewel of its crown. We may likewise add that it is the promise for extension of this system which has served as a pretext for the creation of the Ministry of the Colonies. "One of the principal functions of the Ministry of the Colonies," wrote Mr. Boulanger, reporter of the committee, "should be to extend our commercial relations with our distant possessions, to facilitate the foundation of counting-houses, and to this end the plan of a decree anticipates the erection of a system designed to obtain a collection of intelligence concerning the conditions of labor abroad."

It seems, then, to us that the means of information are not wanting, and that our producers have but the difficulty of choice in the information furnished to them from all sides. But this is nothing as yet. The chambers of commerce hold at the disposal of the public all the documents that can interest our various branches of industry. These documents are published separately, or collected in one volume which appears every year. Moreover, there are abroad twenty-three French chambers of commerce, the mission of which consists in pointing out to public authorities the measures of utility for our countrymen to send samples and to keep our manufacturers up to the usages and needs of foreign customers. Most of these chambers of commerce publish very interesting bulletins which are veritable mines of information from which our producers can borrow freely.

This is not all. Would it be believed that this institution of commercial attachés, which it is desired to create at great expense, has long existed, that it operates admirably without costing the budget one centime? All the world knows that our principal chambers of commerce and our great commercial schools send abroad every year two or three chosen persons to study

the openings for our industrial and commercial products. These lay missionaries, provided with special knowledge and stimulated with the desire to be appreciated, study thoroughly the portions of Africa, Asia, or America, designated. In short, they are bound to state in writing the results of their observations, and their work is published by the chambers of commerce.

Thus it will be seen that if our producers complain of not being informed, it is because they choose to remain ignorant, and the need of creating new Government employees, in addition to our already innumerable army of public functionaries, is in no wise felt. It is private initiation that is needed, and it is but just to acknowledge it only asks to fulfill its task. Witness the mission that the Chamber of Commerce of Lyons decided to send to China the day after the cessation of hostilities to study the new conditions of the markets of the extreme East. That is an example to follow. All that can be asked of the Government is not to add new wheels to the machinery of bureaucracy, and not to paralyze, by custom-house rule, as absurd as it is disastrous, the free scope of our foreign relations.

Expositions and Museums.*—*French Exhibit at the Philadelphia Commercial Museum.*—The French Minister of Commerce, Industry, Posts, and Telegraphs has addressed a circular letter to the chambers of commerce of France and Algeria notifying them of the establishment of a commercial museum at Philadelphia,† and the desire of the directors thereof that French manufacturers should send samples of their wares thereto, for which the American market might eventually offer advantageous openings.

Berlin Exposition in 1896.—An industrial exposition will take place next year (from May to October) at Berlin, under the patronage of Prince Frederic Leopold, of Prussia, and the honorary presidency of Baron de Berlepsch, Minister of Commerce. This exposition will be open for the products of Berlin industry only. It also comprises a retrospective exposition of the decorative arts, in which will appear the most valuable samples of the imperial collections. The exposition of Berlin will be divided into twenty-four groups, viz: (1) Textile industry; (2) clothing industry; (3) industry and art of building; (4) wood industry; (5) porcelain, crockery, and glass industry; (6) toys and fancy articles; (7) metal industry; (8) graphic and decorative arts, and book industry; (9) chemical industry; (10) food products; (11) scientific instruments; (12) musical instruments; (13) construction of machines and ships and means of transportation; (14) electricity; (15) industries of leather and india rubber; (16) paper industry; (17) photography; (18) medicine and hygiene; (19) institutions and education; (20) fishing and navigation and sports in connection therewith; (21) touring and equitation, naval sport, cycling, shooting and hunting, aërostation; (22)

* Translated from the *Revue du Commerce Extérieur*, Paris, of August 10 and 24, 1895.

See CONSULAR REPORTS No. 177 (June, 1895), p. 365.

horticulture ; (23) German colonial exposition ; (24) organization of hotels and restaurants.

Belgian Commercial Agency at Copenhagen.—A group of Belgian tradespeople, desirous to extend their commercial relations into the Scandinavian countries, has organized a commercial countinghouse in Copenhagen. These merchants, fifty in number, have secured the maintenance of this establishment by means of a subscription, the amount of which will reach 8,000 or 10,000 francs, and to which each one of them has contributed in proportion to the importance of his business. At the head of the countinghouse will be placed a director of Belgian nationality, well acquainted with Denmark and the language of the country, who will have for assistant an agent authorized to travel in Sweden, Norway, and Finland. The Belgian industries, principally of metals and minerals, hope to augment their custom by means of this institution in the countries in the north of Europe, and already the coal industry has succeeded in developing the sale of its products, notably that of briquettes, in Denmark and Finland. Perhaps French trade might be inspired by this example, and form a syndicate to obtain in Denmark a steady agent knowing the language and usages of trade in that region. (Communication from the Minister of France at Copenhagen.)

Greater Scope for French Chambers of Commerce.—In a speech recently delivered by Mr. André Lebon, Minister of Commerce, on the occasion of the reception given him by the Chamber of Commerce at Paris, it was announced that he was considering a plan for giving greater scope to the chambers of commerce, both in regard to their powers and to the use of their financial resources. Mr. André Lebon, to keep the engagement made by him, has just addressed to the chambers of commerce a plan for reform in the present legislation, on the subject of which he asks them to let him know their opinion before the 15th of September next.

These are the principal modifications indicated in this plan :

At present, the chambers of commerce can correspond with each other and promote, by the intervention of their president, an understanding concerning subjects coming within their powers and interesting at the same time their respective jurisdictions. Henceforth, conformably to the proposition adopted by the Chamber of Deputies and submitted to the Senate, the chambers of commerce could assemble, occasionally in temporary conference, to treat of their common interests. The chamber of commerce that would take the initiative in this conference would inform the minister of the date, the duration, and the object of the meeting. The prefects of the departments comprehending the seat of the chambers in deliberation might always assist. All deliberation on subjects foreign to the purpose of the reunion would be null and void. At present, a decree is necessary to designate the locality for commercial exchanges ; in future, this designation would be made by order of the prefect. A decree delivered in council of state is also necessary to authorize the chambers of commerce to contract loans for the crea-

tion of exchanges (bourses), of consular offices, telephone lines, and other similar establishments. In future, this authorization will be accorded to them direct by the Minister of Commerce. Two or more chambers of commerce would be able in future, with reservation of the ministerial approval, to concert together for the purpose of creating, assisting, or maintaining establishments, systems, or works of common interest. * * * It is known that by virtue of the current legislation, the budgets of the chambers of commerce are approved by the minister; the preparatory plan of Mr. André Lebon declares that, independently of the budget relative to the ordinary expenses of their maintenance, the chambers of commerce could establish special budgets for the services administered by them.

Exposition at Tunis.—During one of the last sessions of the Chamber of Commerce at Tunis, an industrial exposition in that town was proposed for 1897.

Hungarian Commercial Museum.—Mr. Daniel, the royal Hungarian Minister of Commerce, has authorized the creation of two new agencies for the Hungarian Commercial Museum, one at Alexandria, and the other at New York; and he has just signed the nomination of M. Adolphe Stross as chief of the agency at Alexandria, and that of the firm of Falck & Co., for the agency at New York. At present, the Hungarian Commercial Museum has control of ten representatives, five agencies, and one reporting agent.

British Trade Returns.—The accounts of trade and navigation of the United Kingdom for the month of August, and for the eight months ended August 31, 1895, make the following showing of British imports and exports:

IMPORTS.

Month and eight months.	1894.		1895.	
Month ended August 31.....	£31,628,531	\$153,904,431	£34,611,305	\$168,418,610
Increase.....			2,982,774	14,514,179
Eight months ended August 31.....	274,430,409	1,335,378,370	273,390,865	1,330,319,949
Decrease.....			1,039,544	5,058,421

The following articles show an increase during the month: Articles of food and drink, dutiable and free; manufactured articles, raw materials for sundry industries and manufactures, raw materials for textile industries, chemicals, dyestuffs and tanning materials, oils, and parcel post. Live animals and tobacco are the only articles showing a decrease during the month.

The following articles show a decrease during the eight months: Raw materials for textile manufactures, \$7,350,579; miscellaneous articles, \$7,066,405; articles of food and drink, duty free, \$6,463,755; animals,

living, for food, \$3,212,046; metals, \$3,171,659; tobacco and raw materials for various industries.

The following articles show an increase during the eight months: Manufactured articles, \$16,555,592; articles of food and drink, dutiable, \$4,139,506; oils, \$1,224,777; parcel post, \$619,928; and chemicals, dyestuffs and tanning materials.

EXPORTS.

British and Irish produce and manufactures.

Month and eight months.	1894.		1895.	
Month ended August 31.....	£18,581,240	\$90,416,313	£20,481,495	\$99,712,954
Increase.....			1,900,255	9,296,641
Eight months ended August 31.....	143,863,251	700,038,579	147,156,497	716,073,246
Increase			3,295,246	16,034,667

Live animals for food, and machinery and millwork are the only articles showing a decreased export during the month. The greatest increase took place in yarns and textile fabrics (\$5,949,172), followed in the order of their increase by "all other articles," metals and manufactures of metals, raw materials, apparel and articles of personal wear, parcel post, articles of food and drink, etc. The articles showing decreased export during the eight months are raw materials (\$5,713,000), metals and manufactures of metals, chemicals and chemical products, and articles of food and drink.

The articles which show an increase during the eight months are: Yarns and textiles, \$11,629,740; "all other articles," \$10,987,000; machinery and millwork, \$1,536,000; parcel post, live animals, apparel, etc.

Exports of foreign and colonial produce and manufactures.

Month and eight months.	1894.		1895.	
Month ended August 31.....	£5,127,380	\$24,949,831	£6,189,702	\$30,119,089
Increase.....			1,062,322	5,169,258
Eight months ended August 31.....	39,071,043	190,119,695	41,211,007	200,532,760
Increase.....			2,139,964	10,413,065

We have thus for the eight months ended August 31, 1894 and 1895:

Total trade.	1894.		1895.	
Imports.....	£274,430,409	\$1,335,378,370	£273,390,865	\$1,330,319,949
Exports.....	182,934,294	890,058,274	188,369,504	916,606,006
Excess of imports.....	91,496,115	445,320,096	85,021,361	413,713,943

CONTENTS.

	Page.
I.—TREATY BETWEEN EGYPT AND GREECE.....	257
II.—AMERICAN FURNITURE FOR EGYPT.....	259
III.—COTTON CROP OF EGYPT.....	259
IV.—HIGHER EDUCATION IN EGYPT.....	260
V.—USES OF PEAT IN EUROPE.....	260
VI.—HORSELESS CARRIAGES IN FRANCE.....	265
VII.—AMERICAN LEATHER IN GERMANY.....	267
VIII.—QUEBRACHO AS A TANNING MATERIAL....	269
IX.—WESTPHALIAN HAMS.....	271
X.—AMERICAN SHOES IN IRELAND.....	273
XI.—THE WOOLEN INDUSTRY IN FRANCE.....	275
XII.—PREVENTION OF FOREST FIRES.....	276
XIII.—FORESTRY LAWS OF EUROPE.....	279
XIV.—INFANTILE LIFE INSURANCE IN EUROPE.....	280
XV.—PRIVATE INSURANCE COMPANIES IN SWITZERLAND.....	284
XVI.—NEW CUSTOMS REGULATIONS IN MADAGASCAR.....	285
XVII.—NORTH SEA-BALTIC CANAL.....	290
XVIII.—COTTON FACTORIES IN BAHIA.....	291
XIX.—SALT INDUSTRY OF VENEZUELA.....	293
XX.—GERMAN EMIGRATION.....	296
XXI.—THE GERMAN EXPORT TRADE.....	297
XXII.—SUPPRESSING SWINE PLAGUE IN LUXEMBURG.....	298
XXIII.—LABOR LEGISLATION IN LUXEMBURG.....	299
XXIV.—BRITISH AND AMERICAN CONSULAR REPORTS.....	300
XXV.—AFFAIRS IN KOREA.....	302
XXVI.—EXPORTS DECLARED FOR THE UNITED STATES.....	305
(Algeria, 305—Austria-Hungary, 305—Belgium, 307—Brazil, 309— British Africa, 309—British India, 309—Canada, 310—French North America, 312—Ceylon, 313—Cuba, 313—Denmark, 314— Dutch West Indies, 315—Germany, 315—Gibraltar, 319—Greece, 319—Italy, 319—Japan, 323—Luxemburg, 324—Mexico, 324— New Zealand, 327—Nicaragua, 327—Russia, 327—Spain, 328— Sweden and Norway, 329—Switzerland, 330—United Kingdom, 331.)	
XXVII.—GUM COPAL (BUCARAMANQUINA) IN COLOMBIA.....	343

	Page.
XXVIII.—AMERICAN OPPORTUNITIES IN URUGUAY.....	344
XXIX.—CATTLE INDUSTRY OF URUGUAY.....	348
XXX.—PARAGUAYAN-AMERICAN TRADE.....	351
XXXI.—PARIS EXPOSITION OF 1900.....	352
XXXII.—PARIS CONFERENCE ON WEIGHTS AND MEASURES.....	353
XXXIII.—COTTON MILLS IN CHINA..	354
XXXIV.—TRADE OF CHINA IN 1894.....	360
XXXV.—STATUS OF FOREIGN JEWS IN RUSSIA.....	364
XXXVI.—REVIVAL OF THE MOHAIR TRADE.....	366
XXXVII.—AGRICULTURAL STATISTICS OF IRELAND.....	370
XXXVIII.—AGRICULTURAL STATISTICS OF VICTORIA.....	372
XXXIX.—CATTLE EXPORTS OF NEW SOUTH WALES AND QUEENSLAND.....	374
XL.—GRAIN CROPS OF EUROPE.....	378
XLI.—NEW RAILROAD IN SYRIA.....	380
XLII.—COMMERCIAL MISSIONS TO EASTERN ASIA.....	381
XLIII.—NOTES (Activity in the German Iron and Steel Trade—Moselle Vintage of 1895—French Demand for American Woods—Exports of Cuban Sugar—Unusual Flood of the Nile—United States Capital in Santo Domingo—Lemon Crop of Palermo—Depression in the Brimstone Industry—Diversion of Hawaiian Trade from San Francisco to New York—New Railroad in New Brunswick—Treaty Between Central American States—Affairs in Nicaragua: British Indemnity, Custom- House Regulations, Railroads and Telegraph—Inundation of the Rio Grande—Manufacture of Matches in Belgium—New Steamship Line from Trieste—Trade of Cochin—Copyright Treaty between Mexico and Spain—An Opportunity for Astronomical Instrument Sellers—Rolling Stock for South African Railways—Consular Reports Reprinted Abroad—Consular Reports Transmitted to Other Depart- ments)	383
XLIV.—FOREIGN REPORTS AND PUBLICATIONS (British Trade Returns—Exhi- bition of the South African Republic—New Railways in Japan—The New Treaty Port of Sha-shih—Projected Canal between the Baltic and Black Seas—British Commercial Mission to China—French Mission to the Far East—Artificial Wines of Portugal).....	393

REPORTS BY COUNTRIES.

	Page.
ALGERIA:	
Exports declared for the United States in.....	305
AUSTRALIA:	
Agricultural statistics of Victoria.....	372
Cattle exports of New South Wales and Queensland	374
AUSTRIA-HUNGARY:	
Exports declared for the United States in.....	305
New steamship line from Trieste.....	390
BELGIUM:	
Exports declared for the United States in.....	307
Manufacture of matches in.....	390
BRAZIL:	
Cotton factories in Bahia.....	291
Exports declared for the United States in.....	309
BRITISH AFRICA:	
Exports declared for the United States in.....	309
BRITISH INDIA:	
Exports declared for the United States in.....	309
CANADA:	
Exports declared for the United States in.....	310
New railroad in New Brunswick.....	386
Prevention of forest fires in.....	276
CENTRAL AMERICAN STATES:	
Treaty between.....	387
CEYLON:	
Exports declared for the United States in.....	313
CHINA:	
Cotton mills in.....	354
Trade of, in 1894.....	360
COLOMBIA:	
Gum copal (bucaramanquina) in.....	443
CUBA:	
Exports of sugar from.....	384
DENMARK:	
Exports declared for the United States in.....	314
DUTCH WEST INDIES:	
Exports declared for the United States in.....	315
EASTERN ASIA:	
Commercial missions to.....	381
EGYPT:	
American furniture for.....	259
Cotton crop of.....	259
Higher education in.....	260
Treaty with Greece.....	257
Unusual flood of the Nile.....	384

IV

REPORTS BY COUNTRIES.

	Page.
EUROPE:	
Forestry laws of.....	279
Grain crops of.....	378
Infantile life insurance in.....	280
Uses of peat in.....	260
FRANCE:	
Horseless carriages in.....	265
Paris conference on weights and measures.....	353
Paris exposition of 1900.....	352
Woolen industry in.....	275
FRENCH NORTH AMERICA:	
Exports declared for the United States in.....	312
GERMANY:	
Activity in the iron and steel trade of.....	383
American leather in.....	267
Emigration from.....	296
Export trade of.....	297
Exports declared for the United States in.....	315
North Sea-Baltic Canal.....	290
Quebracho as a tanning material in.....	269
Westphalian hams.....	271
GIBRALTAR:	
Exports declared for the United States in.....	319
GREAT BRITAIN:	
British and American consular reports.....	300
Revival of the mohair trade.....	366
GREECE:	
Treaty with Egypt.....	257
HAWAII:	
Diversion of Hawaiian trade from San Francisco to New York.....	385
INDIA:	
Trade of Cochin.....	391
IRELAND:	
Agricultural statistics of.....	370
American shoes in.....	273
ITALY:	
Depression in the brimstone industry in.....	385
Exports declared for the United States in.....	319
Lemon crop of Palermo.....	385
JAPAN:	
Exports declared for the United States in.....	323
KOREA:	
Affairs in.....	302
LUXEMBURG:	
Exports declared for the United States in.....	324
Labor legislation in.....	299
Moselle vintage of 1895.....	383
Suppressing swine plague in.....	298
MADAGASCAR:	
New customs regulations in.....	285
MEXICO:	
Copyright treaty with Spain.....	391
Exports declared for the United States in.....	324
Inundation of the Rio Grande.....	389

REPORTS BY COUNTRIES.

V

NEW ZEALAND :	Page.
Exports declared for the United States in.....	327
NICARAGUA :	
Affairs in.....	387
Exports declared for the United States in.....	327
PARAGUAY :	
American trade with.....	351
RUSSIA :	
Exports declared for the United States in.....	327
Status of foreign Jews in.....	364
SANTO DOMINGO :	
United States capital in.....	385
SOUTH AFRICA :	
Rolling stock for railways in.....	391
SPAIN :	
An opportunity for astronomical instrument sellers in.....	391
Copyright treaty with Mexico.....	391
Exports declared for the United States in.....	328
SWEDEN AND NORWAY :	
Exports declared for the United States in.....	329
SWITZERLAND :	
Exports declared for the United States in.....	330
Private insurance companies in.....	284
SYRIA :	
New railroad in.....	380
UNITED KINGDOM :	
Exports declared for the United States in.....	331
URUGUAY :	
American opportunities in.....	344
Cattle industry of.....	348
VENEZUELA :	
Salt industry of.....	293

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1894, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.2 cents in April, 1894, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—Countries with fixed currencies.

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange." It follows, therefore, that when foreign money orders are required, the post-office authorities, to save the Department from incurring loss in such transactions, add the rate of exchange to these valuations.

Countries.	Standard.	Monetary unit.	Value in terms of United States gold.	Coins.
Argentine Republic*....	Gold and silver...	Peso	\$0.96, 5	Gold—Argentine (\$4.82, 4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20, 3	Gold—20 crowns (\$4.05, 2) and 10 crowns.
Belgium.....	Gold and silver...	Franc.....	.19, 3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis .....	.54, 6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland)).	.... do.....	Dollar.....	1.00	
Chile‡.....	Gold and silver...	Peso .....	.92, 2	Gold—escudo (\$1.82, 4), doubloon (\$4.56, 1), and condor (\$9.12, 8); silver—peso and divisions.
Cuba.....	....do.....	....do.....	.92, 6	Gold—doubloon (\$5.01, 7); silver—peso.
Denmark.....	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Egypt.....	....do.....	Pound (100 piasters).	4.94, 3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	....do.....	Mark.....	.19, 3	Gold—10 and 20 marks (\$1.93 and \$3.85, 9).
France.....	Gold and silver...	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany.....	Gold	Mark.....	.23, 8	Gold—5, 10, and 20 marks.
Great Britain.....	....do.....	Pound sterling....	4.86, 6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver...	Drachma.....	.19, 3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti.....	....do.....	Gourde.....	.96, 5	Silver—gourde.
Italy.....	....do.....	Lira.....	.19, 3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Liberia.....	Gold	Dollar.....	1.00	
Netherlands‡.....	Gold and silver...	Florin.....	.40, 2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland.....	Gold	Dollar.....	1.01, 4	Gold—\$2 (\$2.02, 7).
Portugal.....	Gold	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Spain.....	Gold and silver...	Peseta.....	.19, 3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway...	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Switzerland.....	Gold and silver...	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey.....	Gold	Piaster.....	.04, 4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver...	Bolivar.....	.19, 3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

*In 1874 and 1875 the gold standard prevailed in the Argentine Republic. Its currency does not appear in the statements again until 1883, when the double standard prevailed, and the peso attained a fixed value of 96.5 cents.

†On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ending July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡The gold standard prevailed in Chile until January 1, 1890. The value of the peso has been the same under both standards.

§The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

B.—Countries with fluctuating currencies, 1874-'90.

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875	1878.	1880.	1883.	1884.
Austria-Hungary*	Silver.....	Florin.....	\$0.47,6	\$0.45,3	\$0.45,3	\$0.41,3	\$0.40,1	\$0.39,8
Bolivia.....	do.....	Dollar until 1880; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America...	do.....	Peso.....	.96,5	.91,8	.91,8	.83,6		
China.....	Silver.....	Haikwan tael...	1.61	1.61				
Colombia.....	do.....	Peso.....	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador.....	do.....	do.....	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†.....	Gold.....	Pound (100 piasters).			4.97,4	4.97,4	4.90	4.90
India.....	Silver.....	Rupee.....	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan.....	{ Gold..... Silver..... }	{ Yen.....	{ .99,7 .99,7 }	.99,7	.99,7	.99,7		
Mexico.....	do.....	Dollar.....	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands ‡.....	Gold and silver..	Florin.....	.40,5	.38,5	.38,5	.40,2		
Peru.....	Silver.....	Sol.....	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia.....	do.....	Ruble.....	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli.....	do.....	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*	Silver.....	Florin.....	\$0.39,3	\$0.37,1	\$0.35,9	\$0.34,5	\$0.33,6	\$0.42
Bolivia.....	do.....	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America...	do.....	Peso.....				.69,9	.68	.85
Colombia.....	do.....	do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador.....	do.....	do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†.....	Gold.....	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.93,3
India.....	Silver.....	Rupee.....	.37,8	.35,7	.34,6	.33,2	.32,3	.40,4
Japan.....	{ Gold..... Silver..... }	{ Yen.....	{ .85,8 .81 }	.81	.78,4	.75,3	.73,4	.91,7
Mexico.....	do.....	Dollar.....	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru.....	Silver.....	Sol.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia.....	do.....	Ruble.....	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli.....	do.....	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1852. The law of August 2 of that year (*see* CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at \$4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—Quarterly valuations of fluctuating currencies, 1891-'94.

Countries.	Monetary unit.	1892.				1893.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Austria-Hungary *	{ Gold crown.....				\$0.20,3				
	{ Silver florin.....	\$0.34,1	\$0.32,8	\$0.32					
Bolivia.....	Silver boliviano.....	.69,1	.66,5	.64,9	.61,6	\$0.61,3	\$0.61	\$0.60,4	\$0.53,1
Central America...	Silver peso.....	.69,1	.66,5	.64,9	.61,6	.61,3	.61	.60,4	.53,1
China†.....	{ Shanghai tael..	1.02,1	.98,2	.95,8	.91	.90,6	.90,1	.89,2	.78,4
	{ Haikwan tael..	1.13,7	1.09,3	1.06,7	1.01,3	1.01	1.00,4	.99,4	.87,4
Colombia.....	Silver peso.....	.69,1	.66,5	.64,9	.61,6	.61,3	.61	.60,4	.53,1
Ecuador.....	.....do.....	.69,1	.66,5	.64,9	.61,6	.61,3	.61	.60,4	.53,1
India.....	Silver rupee.....	.32,8	.31,6	.30,8	.29,3	.29,2	.29	.28,7	.25,2
Japan‡.....	Silver yen.....	.74,5	.71,6	.69,9	.66,4	.66,1	.65,8	.65,1	.57,3
Mexico.....	Silver dollar.....	.75	.72,2	.70,4	.66,9	.66,6	.66,2	.65,6	.57,7
Peru.....	Silver sol.....	.69,1	.66,5	.64,9	.61,6	.61,3	.61	.60,4	.53,1
Russia‡.....	Silver ruble.....	.55,3	.53,1	.51,9	.49,2	.49,1	.48,8	.48,3	.42,5
Tripoli.....	Silver mahbub..	.62,3	.60	.58,5	.55,5	.55,3	.55	.54,5	.47,9
Venezuela].....	Silver bolivar....	.13,8	.13,3	.13	.12,3				

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia.....	Silver boliviano	\$0.51,6	\$0.46,5	\$0.45,7	\$0.46,4	\$0.45,5	\$0.44,1	\$0.48,6	.48,6
Central America....	Silver peso.....	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
China†.....	{ Shanghai tael..	.76,2	.68,6	.67,6	.68,5	.67,3	.65,2	.71,8	.71,8
	{ Haikwan tael..	.84,9	.76,5	.75,3	.76,3	.74,9	.75,6	.80	.80,0
	{ Tien-Tsin tael.				.72,7	.71,4	.69,2	.76,1	.76,2
	{ Chefoo tael.....				.71,7	.70,4	.68,3	.75,1	.75,2
Colombia.....	Silver peso.....	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Ecuador.....	.....do.....	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
India.....	Silver rupee.....	.24,5	.22,1	.21,7	.22	.21,6	.21,0	.23,1	.23,1
Japan‡.....	Silver yen.....	.55,6	.50,1	.49,3	.50	.49,1	.47,6	.52,4	.52,4
Mexico.....	Silver dollar.....	.56	.50,5	.49,7	.50,4	.49,5	.47,9	.52,8	.52,8
Peru.....	Silver kran.....							.08,9	.09,0
Peru.....	Silver sol.....	.51,6	.46,5	.45,7	.46,4	.45,5	.44,1	.48,6	.48,6
Russia‡.....	Silver ruble.....	.41,3	.37,2	.36,6	.37,1	.36,4	.35,3	.38,9	.38,9
Tripoli.....	Silver mahbub..	.46,5	.41,9	.41,3	.41,8	.41,1	3.9,8	.43,8	.43,8

* Austria-Hungary had the silver standard up to August, 1892 (*see* note to "fluctuating" table B).

† China (silver). The Haikwan tael is the customs tael, and the Shanghai tael that used in trade. Consul-General Denny (CONSULAR REPORTS No. 43, p. 516) says: "The value of the tael varies in the different ports of China, and every port has two taels, one being the Government, or Haikwan, tael, in which all duties have to be paid, and the other the market tael, the former exceeding the latter by some 11 per cent."

‡ Gold is the nominal standard in Japan, but silver is practically the standard. The fixed value of the gold yen is 99.7 cents.

‡ The gold ruble is valued at 77.2 cents. Silver is the nominal standard, but paper is the actual currency, and its depreciation is measured by the gold standard.

] The Venezuelan bolivar became fixed in value (19.3 cents) on January 1, 1892.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalent.
Almude.....	Portugal.....	4.422 gallons.
Ardeb.....	Egypt.....	7.6907 bushels.
Are.....	Metric.....	0.02471 acre.
Arobe.....	Paraguay.....	25 pounds.
Arratel or libra.....	Portugal.....	1.011 pounds.
Arroba (dry).....	Argentine Republic.....	25.3175 pounds.
Do.....	Brazil.....	32.38 pounds.
Do.....	Cuba.....	25.3664 pounds.
Do.....	Portugal.....	32.38 pounds.
Do.....	Spain.....	25.36 pounds.
Do.....	Venezuela.....	25.4024 pounds.
Arroba (liquid).....	Cuba, Spain, and Venezuela.....	4.263 gallons.
Arshine.....	Russia.....	28 inches.
Arshine (square).....	.....do.....	5.44 square feet.
Artel.....	Morocco.....	1.12 pounds.
Baril.....	Argentine Republic and Mexico.....	20.0787 gallons.
Barrel.....	Malta (customs).....	11.4 gallons.
Do.....	Spain (raisins).....	100 pounds.
Berkovet.....	Russia.....	361.12 pounds.
Bongkal.....	India.....	832 grains.
Bonw.....	Sumatra.....	7,096.5 square meters.
Bu.....	Japan.....	0.1 inch.
Butt (wine).....	Spain.....	140 gallons.
Caffiso.....	Malta.....	5.4 gallons.
Candy.....	India (Bombay).....	529 pounds.
Do.....	India (Madras).....	500 pounds.
Cantar.....	Morocco.....	113 pounds.
Do.....	Syria (Damascus).....	575 pounds.
Do.....	Turkey.....	124.7036 pounds.
Cantaro (Cantar).....	Malta.....	175 pounds.
Carga.....	Mexico and Salvador.....	300 pounds.
Catty.....	China.....	1.333 1/3 (1 1/3) pounds.
Do.....	Japan.....	1.31 pounds.
Do.....	Java, Siam, Malacca.....	1.35 pounds.
Do.....	Sumatra.....	2.12 pounds.
Centaro.....	Central America.....	4.2631 gallons.
Centner.....	Bremen and Brunswick.....	117.5 pounds.
Do.....	Darmstadt.....	110.24 pounds.
Do.....	Denmark and Norway.....	110.11 pounds.
Do.....	Nuremberg.....	112.43 pounds.
Do.....	Prussia.....	113.44 pounds.
Do.....	Sweden.....	93.7 pounds.
Do.....	Vienna.....	123.5 pounds.
Do.....	Zollverein.....	110.24 pounds.
Do.....	Double or metric.....	220.46 pounds.
Chih.....	China.....	14 inches.
Coyan.....	Sarawak.....	3,098 pounds.
Do.....	Siam (Koyan).....	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Cuadra.....	Argentine Republic.....	4.2 acres.
Do.....	Paraguay.....	78.9 yards.
Do.....	Paraguay (square).....	8.077 square feet.
Do.....	Uruguay.....	Nearly 2 acres.
Cubic meter.....	Metric.....	35.3 cubic feet.
Cwt. (hundredweight).....	British.....	112 pounds.
Dessiatine.....	Russia.....	2.6997 acres.
Do.....	Spain.....	1.599 bushels.
Drachme.....	Greece.....	Half ounce.
Dun.....	Japan.....	1 inch.
Egyptian weights and measures.....	(See CONSULAR REPORTS No. 144.)	
Fanega (dry).....	Central America.....	1.5745 bushels.
Do.....	Chile.....	2.575 bushels.
Do.....	Cuba.....	1.599 bushels.
Do.....	Mexico.....	1.54728 bushels.
Do.....	Morocco.....	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do.....	Uruguay (double).....	7.776 bushels.
Do.....	Uruguay (single).....	3.888 bushels.
Do.....	Venezuela.....	1.599 bushels.
Fanega (liquid).....	Spain.....	16 gallons.
Feddan.....	Egypt.....	1.03 acres.
Frail (raisins).....	Spain.....	50 pounds.
Frasco.....	Argentine Republic.....	2.5096 quarts.
Do.....	Mexico.....	2.5 quarts.
Fuder.....	Luxemburg.....	264.17 gallons.
Garnice.....	Russian Poland.....	0.88 gallon.
Gram.....	Metric.....	15.432 grains.
Hectare.....	do.....	2.471 acres.
Hectoliter:		
Dry.....	do.....	2.838 bushels.
Liquid.....	do.....	26.417 gallons.
Joch.....	Austria-Hungary.....	1.422 acres.
Ken.....	Japan.....	4 yards.
Kilogram (kilo).....	Metric.....	2.2046 pounds.
Kilometer.....	do.....	0.621376 mile.
Klafter.....	Russia.....	216 cubic feet.
Kota.....	Japan.....	5.13 bushels.
Korrec.....	Russia.....	3.5 bushels.
Last.....	Belgium and Holland.....	85.134 bushels.
Do.....	England (dry malt).....	82.52 bushels.
Do.....	Germany.....	2 metric tons (4,480 pounds).
Do.....	Prussia.....	112.29 bushels.
Do.....	Russian Poland.....	11 3/8 bushels.
Do.....	Spain (salt).....	4,760 pounds.
League (land).....	Paraguay.....	4,633 acres.
Li.....	China.....	2,115 feet.
Libra (pound).....	Castilian.....	7,100 grains (troy).
Do.....	Argentine Republic.....	1.0127 pounds.
Do.....	Central America.....	1.043 pounds.
Do.....	Chile.....	1.014 pounds.
Do.....	Cuba.....	1.0161 pounds.
Do.....	Mexico.....	1.01465 pounds.
Do.....	Peru.....	1.0143 pounds.
Do.....	Portugal.....	1.011 pounds.
Do.....	Uruguay.....	1.0143 pounds.
Do.....	Venezuela.....	1.0161 pounds.
Liter.....	Metric.....	1.0567 quarts.
Livre (pound).....	Greece.....	1.1 pounds.
Do.....	Guiana.....	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Load.....	England (timber).....	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 super- ficial feet.
Manzana	Costa Rica.....	1½ acres.
Marc.....	Bolivia.....	0.507 pound.
Maund.....	India.....	82½ pounds.
Meter.....	Metric	39.37 inches.
Mil.....	Denmark.....	4.68 miles
Do.....	Denmark (geographical).....	4.61 miles.
Morgen.....	Prussia.....	0.63 acre.
Oke.....	Egypt.....	2.7225 pounds.
Do.....	Greece	2 84 pounds.
Do.....	Hungary	3.0817 pounds.
Do.....	Turkey.....	2.85418 pounds.
Do.....	Hungary and Wallachia.....	2.5 pints.
Pic.....	Egypt.....	21¼ inches.
Picul.....	Bornco and Celebes.....	135.64 pounds.
Do.....	China, Japan, and Sumatra.....	133½ pounds.
Do.....	Java	135.1 pounds.
Do.....	Philippine Islands (hemp).....	139.45 pounds.
Do.....	Philippine Islands (sugar).....	140 pounds.
Pie.....	Argentine Republic.....	0.9478 foot.
Do.....	Castilian	0.91407 foot.
Pik.....	Turkey.....	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound).....	Denmark and Sweden.....	1.102 pounds.
Quarter.....	Great Britain.....	8.252 bushels.
Do.....	London (coal).....	36 bushels.
Quintal.....	Argentine Republic.....	101.42 pounds.
Do.....	Brazil.....	130.06 pounds.
Do.....	Castile, Chile, Mexico, and Peru.....	101.61 pounds.
Do.....	Greece	123.2 pounds.
Do.....	Newfoundland (fish).....	112 pounds.
Do.....	Paraguay.....	100 pounds.
Do.....	Syria.....	125 pounds.
Do	Metric	220.46 pounds.
Rottle.....	Palestine.....	6 pounds.
Do.....	Syria.....	5¾ pounds.
Sagen.....	Russia	7 feet.
Salm.....	Malta.....	490 pounds.
Se.....	Japan.....	3.6 feet.
Seer.....	India.....	1 pound 13 ounces.
Shaku.....	Japan.....	10 inches.
Sho.....	.....do.....	1.6 quarts.
Standard (St. Petersburg).....	Lumber measure.....	165 cubic feet.
Stone	British	14 pounds.
Suerte.....	Uruguay.....	2,700 cuadras (<i>see cua-</i> <i>dra</i>).
Tael	Cochin China.....	590.75 grains (troy).
Tan.....	Japan.....	0.25 acre.
To.....	.....do.....	2 pecks.
Ton.....	Space measure.....	40 cubic feet.
Tonde (cereals).....	Denmark.....	3.94783 bushels.
Tondeland .....	.....do.....	1.36 acres.
Tsubo.....	Japan.....	6 feet square.
Tsun.....	China.....	1.41 inches.
Tunna	Sweden.....	4.5 bushels.
Tunnland.....	.....do.....	1.22 acres.
Vara.....	Argentine Republic.....	34.1208 inches.
Do.....	Castile.....	0.914117 yard.
Do.....	Central America.....	38.874 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Vara.....	Chile and Peru	33.367 inches.
Do.....	Cuba.....	33.384 inches.
Do.....	Curaçao	33.375 inches.
Do.....	Mexico.....	33 inches.
Do.....	Paraguay.....	34 inches.
Do.....	Venezuela.....	33.384 inches.
Vedro.....	Russia.....	2.707 gallons.
Vergees.....	Isle of Jersey.....	71.1 square rods.
Verst.....	Russia.....	0.663 mile.
Vlocka.....	Russian Poland.....	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

- Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
- Centigram($\frac{1}{100}$ gram) equals 0.1543 grain.
- Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains. .
- Gram equals 15.432 grains.
- Decagram (10 grams) equals 0.3527 ounce.
- Hectogram (100 grams) equals 3.5274 ounces.
- Kilogram (1,000 grams) equals 2.2046 pounds.
- Myriagram (10,000 grams) equals 22.046 pounds.
- Quintal (100,000 grams) equals 220.46 pounds.
- Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measure.

- Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
- Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
- Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
- Liter equals 0.908 quart.
- Decaliter (10 liters) equals 9.08 quarts.
- Hectoliter (100 liters) equals 2.838 bushels.
- Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measure.

- Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
- Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
- Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
- Liter equals 1.0567 quarts.
- Decaliter (10 liters) equals 2.6418 gallons.
- Hectoliter (100 liters) equals 26.418 gallons.
- Kiloliter (100 liters) equals 264.18 gallons.

Metric measures of length.

- Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
- Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
- Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
- Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.

Hectometer (100 meters) equals 328 feet 1 inch.

Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).

Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.

Are (100 square meters) equals 119.6 square yards.

Hectare (10,000 square meters) equals 2.471 acres.

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TREATY BETWEEN EGYPT AND GREECE.

I transmit a copy of the Helleno-Egyptian commercial convention, proclaimed on the 12th of August. This arrangement is mainly in accord with those the Egyptian Government has concluded during the past five years with Great Britain, Austria-Hungary, Belgium, Italy, Germany, and Spain with the intent of bringing the commercial relations of Egypt with all other countries into a condition of uniformity.

As in those cited above, the most-favored-nation treatment is secured and an ad valorem duty not exceeding 10 per cent on the products of the soil and industries provided for, with certain named exceptions limited to 15 per cent. This clause, however, has never been made operative to its limit of 10 per cent in any instance, since the obligation securing impartial treatment acts as a check so long as existing treaty limitations, naming a charge of not over 8 per cent, continue in force.

With the formal denunciation in March, 1891, of the prior commercial treaty the importation of tobacco from Greece ceased. During the year previous, 1,500,000 kilograms (3,306,900 pounds)—nearly one-third of the tobacco entering Egypt—came from Greece. The right to resume the importation of tobacco was made the basis for negotiations, and while, by article 11 of the convention, tobacco is excluded from the stipulations, yet this privilege is secured in the annex (No. 2), and is further protected by a retaliatory provision authorizing the abrogation of the convention should the Khedivial Government remove its prohibition against the cultivation of tobacco or increase the import duty. The exact terms of the reservation are set forth in annex No. 2, a translation of which is inclosed.

I have thought it unnecessary to translate the remainder of the convention, as it is practically similiar to those of Great Britain, Austria-Hungary, and Portugal, of which the Department has been furnished English translations.

In this connection, I append a short statement of our status as respects commerce and navigation with Egypt. The provisions of the former convention between Egypt and Greece were made applicable to the citizens, vessels, commerce, and navigation of the United States by the protocol signed November 16, 1884. The denunciation of this convention terminated that stipulation of the said protocol; but there remained operative a separate and distinct clause providing for the most-favored-nation treatment, as the protocol is, in fact, a *modus vivendi*, pending the negotiations of a fixed convention. On this point, a difference arose. The Khedivial Government intimated that they regarded the protocol as terminating in its entirety by virtue of a note which, it is claimed, was a "substantial notification."

The Government of the United States held this clause to be a permanent agreement, terminable only by mutual consent, or the substitution of a treaty of commerce and navigation between the countries.*

* * * * *

HORACE LEE WASHINGTON,
Vice and Deputy Consul-General.

CAIRO, August 16, 1895.

ANNEX NO. 2 TO HELLENO-EGYPTIAN CONVENTION.

[Translation.]

Mr. Agent and Consul-General:

The commercial convention planned between Greece and Egypt, formally provides in article 11 that tobacco in all forms is excluded from the arrangement.

During the negotiations, you have informed me that Greece attaches the greatest importance [to the proposition] that tobaccos coming from the territory under Greek customs regulations, should be admitted to importation into Egypt with equal conditions, and by means of payment of the same duties that have or will have application to tobaccos of which the introduction into Egypt is or will ultimately be authorized by means of special arrangements.

I am pleased to inform you that the Government of His Highness is entirely disposed to accede to this desire. Commencing with the day when the Government of His Majesty will have officially agreed to apply the customs regulation hereto annexed to its subjects and its commerce, tobacco proceeding from the territory of the Greek customs will be freely permitted to enter Egypt, provided, however, that they should be accompanied with regular certificates of origin. They will not, in any case, be treated on their entry to Egypt less favorably than those coming from every other country, including Turkey.

Allow me, however, in order to avoid all misunderstanding, to recall to you what I have already had the honor to inform you in conversation, that by this concession, the Government of His Highness does not intend to alienate nor lessen its absolute right to arrange its regulations concerning tobaccos in the manner it judges proper, its liberty of action remains intact. It shall have, then, the right at any moment to modify the customs duties, to suspend the importation either temporarily or definitely, with the reservation that all actions taken in this respect might be equally applicable to tobaccos, whose admission into Egypt is or would be ultimately authorized by means of special arrangements. Nevertheless, the Government of His Highness promises never to create a monopoly in tobacco during the duration of this convention.

* The matter is still a subject of diplomatic negotiation.

On your part, you have told me that the Government of the King reserves expressly the right to abrogate at any moment the commercial convention with Egypt, in case the prohibition of the cultivation of tobacco in the country should be suspended; also, in case the actual duties of importation should be increased. Notice is given you of this reservation.

* * * * *

BOUTROS GHALI,
Minister of Foreign Affairs.

To Mr. GRYPARIS, *Agent and Consul-General.*

AMERICAN FURNITURE FOR EGYPT.

The cost of simple articles of wooden furniture throughout Egypt is noticeably high. The demand, however, aided by a somewhat shifting as well as constantly increasing European population, is good and keeps prices at high figures. The furniture made in the United States, where wood is plentiful, could compete to advantage here, where the duty is but 8 per cent, and there is little home production. The retail prices of the simple grades of household furniture, as advertised in the New York papers, run from one-half to one-third and even less than the prices here. During the past winter, several American business men observed and spoke to me regarding this opening for our productions. I should add, however, that wooden beds should be practically excluded, as, owing to the heat, iron frames are generally used.

HORACE LEE WASHINGTON,
Vice-Consul-General.

CAIRO, *September 9, 1895.*

COTTON CROP OF EGYPT.

From the most reliable information that can be obtained, the cotton crop is now about ten days in advance of last year. The prospects have improved considerably during the last two months, and, provided the atmospheric influences continue favorable, a good average crop will be made. Recent fogs have caused a setback, and the cotton worm has again appeared in the Fayoum district. It is estimated, however, that the increased acreage will bring the production up to the average of the district. The unusual height of the Nile, which has caused the removing of all the inhabitants along its banks, becomes a constant menace to the fields, in addition to reducing the available labor. In the Fayoum district and Upper Egypt, the picking commenced some time ago. In the delta, it is the general opinion that picking will commence from the 10th to the 15th of this month in plantations that have not suffered from the worms.

HORACE LEE WASHINGTON,
Vice and Deputy Consul-General.

CAIRO, *September 10, 1895.*

HIGHER EDUCATION IN EGYPT.

There are five schools of higher instruction at Cairo. These are open to such persons as have passed a trial examination for what is known as the "secondary education certificate." In the various departments of the Government, this examination bears the same relation as does the civil service examination in the United States, but is applied only to the higher divisions. No student is admitted to any of the five colleges if he is under 16. There are two grades of lower schools—the primary, with a four-years' course of study for boys over 7, and the secondary, with a five-years' course, where students are not permitted to remain after their nineteenth year. Scholarships to the number of forty-five are awarded yearly in these colleges, aggregating about \$9,000.

The five colleges comprise a school of law and of medicine, with a course of four and six years, respectively, the tuition fee at each being £15, Egyptian (\$74.15); a polytechnic school for the training of civil engineers and architects, which confers a degree after a four-years' course; and two normal schools—the Tewfikieh, for the training of native teachers of French, and the Khedivial, for the training of native teachers of English. The regulations provide that 10 per cent of the students shall be educated free.

The numbers of students at these colleges from recent statistics are, respectively: Law, 80; medicine, 58; polytechnic, 18; Tewfikieh normal, 11; and Khedivial normal, 10. The education at the last two is entirely free.

HORACE LEE WASHINGTON,
Vice-Consul-General.

CAIRO, *August 26, 1895.*

USES OF PEAT IN EUROPE.

Following is a report on the development of the peat industry in Europe. The application of the substance seems to be practically endless. It makes a fuel as black and as heavy as coal, and it furnishes a snowy paper of superior texture and toughness; it forms a perfect litter for the stable, and supplies a fabric which may be worn by a duchess.

I send some samples* manufactured from peat, which may be interesting as showing some of the results of this most promising branch of industry.

The manifold purposes to which moss peat can be put were first discovered by German investigators, but the industry is now extending to other countries, and while its use as an article of commerce has steadily increased, very little attention, until recently, seems to have been directed to the sub-

*Filed in Bureau of Statistics, Department of State.

ject outside of Germany, where peat has been especially the subject of scientific and practical experiment. America no doubt possesses inexhaustible wealth in peat not yet discovered, but which will some day open up an extensive field for the employment of capital and labor.

Mr. T. Burke, in his interesting monograph on Moss Peat and Its Products, divides the peat industries into two distinct groups, founded on the natural division of the peat itself into two layers—the upper, or “moss peat,” and the lower, or “black peat,” the latter resembling coal somewhat in composition, and approaching still more closely to lignite, which is half way between black peat and coal. Peat industries, he says, may be regarded as still in their infancy, for, although numerous attempts have been made, with varying success, for a century past to turn peat to account industrially as a combustible, the upper layers, known as red or gray moss peat, were practically of no value until within the last few years, when a use was found for them through the introduction of moss litter. Even the black peat was only of local value, as it would not bear transportation to a distance, owing to its bulk, until, by the introduction of processes for carbonizing and compressing the raw peat, this hindrance was overcome.

The many uses that have latterly been found for peat are thus classified :

(1) As moss litter for stables, cow sheds, fowl houses, etc., and subsequently as manure.

(2) As powder for disinfecting purposes for use in connection with sewage removal, and then as manure ; also, for packing perishable objects and for various industrial uses.

(3) For various compressed articles, such as nonconducting bricks and slabs for lining ice boxes, cold-storage rooms, refrigerator cars, etc., and covering boilers and steam pipes ; and miscellaneous articles of great variety, such as embossed panels and ornaments imitating ebony, axle boxes, insulators, machinery bearings, gunstocks, pistol butts, inkstands, table and piano legs, and numerous other articles.

(4) As wool, produced by a patented process from the fibers found in the peat. This is used for the production of a variety of hygienic materials, among them surgical and veterinary dressing, hygienic flannel and dress goods, rugs, blankets, and a number of minor articles. The fiber is also used in the manufacture of paper.

PEAT FIBER AS A TEXTILE.

This last heading constitutes the latest and most important application of peat, not only on account of the value of the materials produced, but because they are produced from a particular portion of the moss peat which formerly was absolutely wasted. When the fiber is extracted, the moss litter is not only improved as a litter, but gains in value for subsequent use as manure ; and, in addition, a material is saved which becomes of great value when worked up by the patented process into the articles mentioned. This fiber can be bleached to snowy whiteness, and will dye any color. One of the

great advantages of cloth made from peat fiber is that it is entirely antiseptic and possesses properties which render it inimical to parasitical organism. In appearance, the finer makes are quite equal to the best tweeds, and closely resemble the camel's-hair cloth.

PEAT AS LITTER.

The advantages of peat litter as compared with other materials for stable bedding are very notable. Professor Fleisher, however, states that the peat from different moors is by no means equally fit to make a good litter. He thinks that the moss peat found in the northwest of Germany is far superior to peat that is found in many other districts, not only in power of absorbing moisture, but also in power of absorbing and retaining ammonia. The absorbing power of moss peat is said to be three times that of straw, and consequently it must afford a drier bed; but it does not follow that it can remain in the stall three times as long as straw, seeing that it retains all the urine, most of which in the case of straw runs away in the drains. In France, M. Vilain, in *La Nature*, asserts that "usage proves that only about half as much moss litter is required as straw, and that the price is as a rule about half that of straw, so that there is an economy of 50 per cent in using the former." In proof of this, the omnibus companies in Paris have found that moss litter costs 4 cents per horse per day as against 8 cents for straw.

As to the effect of moss litter on the air of the stable, Dr. Arnold, of Göttingen, who has devoted much attention to peat, made experiments in the Royal Veterinary College of Germany with the following result: In two loose boxes, the one strewn with moss litter, the other with straw, tests were made of the percentage of ammonia contained in the air. It was found that in the former a trace of ammonia was found only on the fifth day, while on the first day there was more in the straw than on the sixth in the other, and the same percentage which was reached in the straw stall on the sixth day was only reached on the fifteenth day in the moss litter stall. At the end of six days, with moss litter the atmosphere contained 1 milligram of ammonia per cubic meter; with the straw, 17 milligrams.

It is well known that urine is the part of animal excreta which is richest in fertilizing substances, and not only does the peat litter retain this liquid, but owing to its peculiar power of fixing ammonia and other gases, it prevents the escape into the air of these volatile constituents. The magnitude of the saving effected has been shown by M. Grandeau, an eminent French agricultural chemist, who estimated the annual loss to agriculture in France through the carelessness of farmers in allowing the liquid manure to flow away from the manure heap and evaporate, to amount to over \$50,000,000. What is wanted is a substance for use as a litter which will not only absorb but retain and "fix" the whole of the fertilizing properties of the excreta, both liquid and solid, and not readily part with them even when thrown into a heap in the open air, thus taking care of the farmers' wealth which the farmers will not trouble themselves to take care of. Such a substance,

it appears, we have in peat, which, for this reason alone, is entitled to rank as an important factor in national economy.

PEAT AS A MANURE.

The economic importance of the increased use of moss litter, from the point of view of manure, is incalculable. Professor Fleisher points out that, comparing peat and straw manure by chemical analysis, it is found that the former, while slightly poorer in potash, lime, and phosphoric acid, is very considerably richer in nitrogen. But the difference is still more in favor of the peat manure in respect of the easily soluble nitrates, for the reason that these originate solely in the animal excrement, in which they are present in the form of a volatile body, which is noticeable in the stall by its pungent smell. He says:

In the power of fixing this substance, which so injures the health of the beasts, and so materially heightens the good operation of the manure, is to be discovered one of the most valuable properties of moss litter.

From his figures it appears that in a stall of ten head of cattle, through the use of moss litter, about 140 kilograms of easily soluble nitrates yearly, worth at least \$35, would be preserved in the manure, which, in employing straw, are lost.

According to the comparative studies of Lavalard on the subject of manures from animals fed in the same manner, the richness in nitrogen is 0.68 for peat manure and only 0.51 for straw manure. Peat litter is also said to be the best possible material for use in fowl houses, on account of its deodorizing qualities and its power of banishing insects. Biélawski mentions that it is used in the great military pigeon houses in Paris, which contain more than 500 pigeons.

It is stated that the best bedding, both as regards the beasts and as regards the manure, is a layer of straw over a good thick bed of moss litter. In this way, the animals have the most comfortable bed and the stall looks nice and fresh; the urine and the ammonia which the straw can not absorb are absorbed by the peat below; the manure has the advantage of the elements in which each substance is richest, and nothing is lost either in the stable or outside.

A DEODORIZER AND DISINFECTANT.

Nothing is wasted in the process of manufacturing the various articles from peat. Even the dust given off is collected and forms the most effective deodorizer and disinfectant yet discovered for the dry-closet system so much used on the Continent. A writer who has given special attention to the subject of peat as a deodorizer says:

Peat dust or mull has an extraordinary power of deodorizing foul-smelling substances, and this, combined with its great capacity for absorbing liquid, suggested its use as a disinfectant.

The application of peat refuse for disinfecting purposes was strongly recommended in Germany as early as 1850, and a similar practice was known in Norway and Sweden more than forty years ago; and during the epidemic of cholera in Hamburg in 1892, the use of peat as a disinfectant was made compulsory in the city of Christiania. Unlike the preparations of lime and carbolic acid, peat powder in destroying one bad smell does not leave another in its place.

The problem of preserving, for use in agriculture, the chemical elements contained in human excreta is one of immense economic importance. It is well known that the successful intensive cultivation of the soil in China is only attained by carefully husbanding this substance and seeing that none of it is wasted. We, however, not only throw it away, but saddle our municipalities with large debts for the purpose of more completely annihilating these very chemical elements before consigning them to the water courses to poison and render them unhealthy. If it is impossible to manage the sewage removal of the large cities, except by an elaborate sewerage system, such a system is at any rate unnecessary in smaller towns, now that we have in the peat powder a safe, cheap, and efficient substance for use in the dry-closet or pail system. It is a sanitary maxim that dry systems of sewage removal are the best—the wet or water-borne systems used in our large towns are an admitted evil, tolerated only on account of the impracticability of dealing with the sewage of densely populated areas in other ways. The deodorizing power of peat mull is beyond question, and as it is now being generally used in dry closets over large areas of Europe, it certainly demands careful trial and consideration in the United States.

Hitherto the dry closets required daily, per head of population, about 9 or 11 pounds of dry earth, or about $1\frac{1}{2}$ tons per year; now it has been found that one-third of a pound of peat powder per day, or about one hundredweight a year, will more efficiently do the same work, namely, entirely absorb and deodorize the excreta of one individual, making an inoffensive and easily handled mass. It also fixes the ammonia much more effectually, and its consequent richness as manure in proportion to its small bulk makes the item of transportation comparatively insignificant. It sells for about 50 cents per cwt., and, though costing more than earth, would, being thirty times less in bulk, and therefore more readily transportable, be infinitely cheaper.

PACKING MATERIAL.

As a packing material, peat has come into very general use, and it is said to be used with excellent results for packing and preserving perishable goods, such as fruits, vegetables, butter, eggs, etc. Fresh fish have been sent from Trieste to Copenhagen packed in peat mull and arrived in good condition. One experiment made with fish caught in the Adriatic and sent a distance of 500 miles, was very successful. Another shipment sent from Stockholm, and arriving at its destination eighteen days after, was found in perfect condition. The Vienna Agricultural cites a case where pears were preserved

absolutely sound and fresh more than six months in peat mull, and it has been proved that grapes will remain quite fresh for some time, retaining their flavor and the skin remaining free from wrinkles, when inclosed in peat. An instance is also cited where a quarter of raw pork was preserved in peat for two years, and potatoes have been perfectly preserved for eight months in the same way.

SURGICAL AND VETERINARY DRESSING.

It is probable that "peat wool" is destined to play an important part in army and veterinary surgery. Wherever suppuration has set in, it has been found to replace advantageously and very economically all other materials, such as lint, impregnated cotton wadding, and hydrophile wadding. Its cost is very low, scarcely reaching half that of ordinary cotton wadding, and its absorbent principle is much more considerable than that of other textile materials. This absorption does not take place at once, as is the case with scoured cotton (hydrophile), but it proceeds slowly, and will absorb nine times its own weight of moisture. At the same time it is an almost perfect antiseptic. So valuable has it been found for dressing wounds that the French Government, after long experiment, have adopted it for use in the French army, and 12,000 kilograms were sent to Madagascar for use during the expedition in that island.

A writer in the London Lancet, dealing with the use of peat wool in surgery, says:

Even these rough experiments greatly impressed observers, it being found that, whereas previously even large quantities of absorbent wool did not prevent the wound discharge from coming through, and the masses of soaked wool, if left unchanged, from consequently becoming septic; when peat dressings were used the serum and blood were all absorbed, and even after many days the peat thus soaked was perfectly free from decomposition.

Peat fiber, as now prepared for surgical purposes, is a fine, brown, glossy wool, with a faint aromatic smell. It feels a little rougher than fine absorbent wool, but makes a more comfortable dressing, as it is much more elastic.

C. W. CHANCELLOR,
Consul.

HAVRE, *September 19, 1895.*

HORSELESS CARRIAGES IN FRANCE—SUPPLEMENTARY REPORT.

IN view of the large number of communications which I have received from all parts of the United States asking for details in regard to motor-propelled vehicles, including bicycles and tricycles, it may not be out of place to supplement my report of June 24, 1895, on this subject,* with additional data.

* Printed in CONSULAR REPORTS No. 180 (September, 1895), p. 25.

Bicycles and tricycles are propelled by a small petroleum motor. The weight of the entire machine is considerably under 100 pounds, and the price is about \$250. The petroleum vapor is ignited by means of an electric spark. In order to set the machine in motion, the rider mounts, turns a tap to admit the petroleum, which at the same time turns on the electric current that lights the fuel; he then propels the cycle with his feet in the usual manner until he finds the motor is working. Another handle is moved which releases the treadles, and the cycle is then in full swing. On mounting a hill, the rider can assist the speed by gearing up the pedals again and using the feet, thus adding the animal to the engine power. There is also in course of construction a somewhat similar machine to carry two persons.

For the propulsion of ordinary carriages, not constructed with permanent motors, a kind of "steam horse" is used. This is joined to the carriage as an integral part of it. The front wheels of a victoria or of any other carriage are removed and the fifth wheel (or turntable) is attached to the projecting platform of the "steam horse." These small steam engines have tubular boilers, and coke is employed for the fuel. No smoke, steam, or noise is produced at any time. The prices vary, according to size, from \$1,800 to \$2,500. There are the chaise, victoria, phaeton, etc., which in all cases have the appearance of an ordinary carriage with the shafts removed, while in point of weight, the excess is not very great over that of the type of carriage represented. For instance, a victoria, to carry four persons, two inside and two on the box, would weigh under 1,500 pounds.

Most of the engines are of the petroleum type, and the gas is fired by one or more red-hot tubes in the same manner as a gas engine is fired. On the box there is a guiding lever, and another lever to disconnect the engine, releasing a clutch. The lever, when placed in other positions, gives four speeds. A handle is used for reversing, the usual brake lever is present, and a foot lever is employed to release the speed lever acting as a brake. The valve which regulates the flow of the petroleum is also placed near the hand of the driver, but this does not require attention after it has once been set. To start the carriage, it is necessary to stand at the back, light the burners which heat the ignition tubes, and turn the handle till the motor starts. The driver then mounts his box, and, by means of his lever, clutches the engine to the motor parts of the carriage.

As solid, smooth roads are quite essential to the successful use of the French system of *voitures automobiles*, it will be necessary, before this system can be profitably applied in the United States, to bring our roads to the condition of the European highways.

In France, all carriages pay an annual tax. Those with one or two places pay 50 francs (\$9.65); those with three places, 75 francs (\$14.37); and those with four places, 100 francs (\$19.30); bicycles and tricycles pay each 10 francs (\$1.93). These taxes are payable monthly in advance, and no vehicle can go on the road until the tax is paid. As there is a want, generally felt and universally acknowledged, for better roads in America, it is

worth considering whether an income from this source, if capitalized, would not be sufficient of itself to effect the much-needed improvements and keep in repair our highways, thereby rendering them suitable for the operation of motor-propelled vehicles.

C. W. CHANCELLOR,
Consul.

HAVRE, *August 2, 1895.*

AMERICAN LEATHER IN GERMANY.

A recent number of Kuhlows German Trade Review contains the following interesting commentary on the use of American Leather in Germany: It is not very long (15 years) since American leather first came on the German market. When one considers with what prejudice it was then received, it is remarkable how differently people speak of it now, and how generally it has been introduced and found its way. We may say people in many cases prefer it to the home product.

The imports of sole leather to Germany were, it is true, diminished when higher duties were levied; all other kinds of leather, such, for example, as are suitable for the manufacture of shoes, carriages, etc., were marketable notwithstanding the higher duty, and are now in use all over Germany. Leather for bridles, harness, and fancy bags is only imported in slight quantities, and the German article in this class is preferred. This is attributable to the finish, which is entirely done by hand, and to the evenness of the color. This class of leather is principally manufactured in Rhenish Prussia. Carriage leather, enameled hides, dash, railing and fancy upholstery in colors, are regularly imported. Japanned leather has an especially great reputation, as it never sticks in hot weather, nor does it crack when it is cold, besides possessing greater elasticity. It moreover, works up well. Portefeuille leather is used largely in buffings; much of it is imported in the rough and finished on this side.

Great exertions were made to introduce belting leather, but without success. People here do not look so much at quality as price. Some manufacturers who visited America and the Chicago Fair have become appreciative of American belting and are using it. Upper leather, such as glove, grain, imitation goat, buff and waxed splits, are considerably used in this country, and of waxed splits extensive quantities are used all over Germany. The better sorts of flesh splits also find a ready sale, principally for crimping. There is a wide market for rough splits; they are all finished here in black and russet. The inferior qualities are used for wooden shoes, the superior for men's and women's shoes, and the heavier for inner soles. Flexible inner soles, finished in the United States, are also imported. In comparison with America, very few splits are made in this country, as the hides are too spready, and heavier upper leather is employed.

Great efforts have been made to introduce waxed calfskins, but hitherto without much success, because the leather is too hard and not pliable enough and the grain too reddish looking and too highly stuffed. It is acknowledged by some experts here that American calfskins are finer in the finish, plumper and better trimmed, wear well, and cut cheaply. Calfskins, to be made suitable for the European market, should principally be softer, containing lighter stuffing composed of pure tallow, oil, and grease.

Chrome and combination-glazed kid has been introduced and become popular in a short space of time. The first of these skins were brought on the market, as well as all the American leather now in use here, by John Frankin, Frankfort-on-the-Main. The first invoice (100 dozen) was from McNeely & Co., Philadelphia, in the spring of 1891. The skins were of medium grade, at 18 to 20 cents per foot. These were looked upon with distrust and were difficult of sale. They were distributed all over the Continent. In a few cases a whole dozen were purchased, and many of them were returned with uncomplimentary remarks. It is different now. The superior quality of the kid has secured a market for it. It is now used by the shoe manufacturers and the custom makers. Women when purchasing shoes inquire for it. Shoe manufacturers who, three years ago, would not look at American-glazed kid, are now importing it direct, hundreds of dozens at a time. It may fairly be inferred that the manufacture of alum-tanned leather in Germany has seen its last day. This is anticipated by German leather manufacturers, and everyone is trying to discover the secret of production. Many even go to America, and others send for workmen thence.

Chrome kid is manufactured here. I have seen specimens of it and have also taken the opinion of shoe manufacturers on the subject, and can say that the large firms of kid manufacturers have succeeded in making good progress, but as yet can not compete with America. On the whole, German manufacturers look on America as the country they have to follow and strive to emulate.

Sole leather, suitable in every respect for the manufacture of fine shoes of pure oak and scoured as in America, is unknown in this country. This is remarked upon by young shoe manufacturers, who have worked and studied in America and became acquainted with the merits of American sole leather.

Many attempts have been made to import cut soles into Germany, but the results have not been favorable, as the price here is too high and the soles are not cleanly enough fleshed. The duty on cut soles is much higher than on side leather, viz, 60 marks per 100 kilograms, equal to about \$14 per 221 pounds, which is the same as on finished shoes. The shoe manufacturers here make no specialties. They produce all kinds of men's and women's heavy and light shoes.

Horsehide leather is a chief article in Germany, and is for the most part tanned here with quebracho, which imparts to it great toughness, renders it firm of grain and clear in color; it cuts cheaply and makes an inexpensive shoe. It is used exclusively by a large proportion of manufacturers for

women's and children's shoes. It is mostly manufactured in North Germany.

East Indian kips are manufactured in Backnang, Würtemberg, which is another Salem. There are eighty-four tanners there, and the product is sold in competition with horse leather all over the country.

Alligator leather was imported till a few years ago in thousands of dozens; to-day, the receipts of finished leather have fallen to almost nothing. The German leather manufacturers now import the raw skins and finish them here very handsomely. They are, in softness, color, and finish, far superior to those turned out in the United States. They will be used as long as there are alligators to be found in Louisiana and Florida. Hides from alligators from Mexico, and crocodiles from Africa can not be used here.

The import of American leather is now in numerous hands. The Chicago Exhibition has shown to visitors from this side where the best and cheapest leather can be bought. There are dealers in American leather in all the larger cities—Hamburg, Berlin, Frankfort-on-the-Main, Mannheim, Strassburg, etc.—and many of them deal in it exclusively. Some of the larger American leather manufacturers have agents here. English firms, like George Angus & Co., in Liverpool, and Stettaner & Wolff and Barrow Bros., in London, do about the largest business in American leather on the Continent. They send their travelers regularly to the Continent, besides having their representatives in important districts. There are shoe manufacturers who import direct from the United States. Efforts are being made here, even more than in the United States, to buy directly from producers of leather instead of from dealers. Naturally, under the stress of competition, they want to buy as low as they can. Prices of German leather have advanced very much, which makes it easier to obtain the increased prices for the American article. The tanners in this country held back in buying hides on account of the high prices, consequently they have fewer hides in process than usual, so it may be expected that when the winter traffic sets in there will be a scarcity.

H. F. MERRITT,
Consul.

BARMEN, *September 13, 1895.*

QUEBRACHO AS A TANNING MATERIAL.*

German tanners have adopted quebracho and other tanning materials, such as divi-divi, myrobalans, japonica, mimosa, valonia, algarrovilla, etc., in place of oak bark. The leather industry of Germany has shown great progress in recent years, and quebracho, the new tanning material, has produced a revolution in tanning upper and sole leather. Quebracho is now used all over Germany and other countries on the Continent.

* From information furnished by W. M. Kuhlow.

Quebracho wood is imported principally in logs and on sailing vessels. It came originally from the province of Santiago, in Chile, but this source of supply is gradually becoming exhausted. In recent years, in the Argentine Republic, extensive forests of quebracho have been opened up. Of quebracho two varieties are known, the red and the white. Red quebracho is richer in tannin than the white, the average contents being from 18 to 20 per cent. Considering the intrinsic value of this tanning material, it is cheaper than oak bark and nearly as cheap as hemlock. Owing to its very high percentage of tanning qualities, quebracho contains relatively a small proportion of so-called nontanning substances, and in this respect has much resemblance to gambier. These nontanning substances are an important factor in the manufacture of leather, as they fill and nourish the leather, and also impart the necessary acidity to liquors, although not assimilating in a direct manner with the fiber of the hide. Quebracho, it is stated, does not possess a sufficiency of these nontanning properties to yield well-nourished leathers, and its use, therefore, is only to be recommended in combination with other agents stronger in nontanning substances.

The supply of quebracho may be considered inexhaustible. Nearing the thirty-first degree of longitude in the Argentine Republic, the pampas, the largest grazing lands known to the world, gradually develop into immense forests known as chaco. The chaco is wonderful for its luxuriant and varied vegetation. Within its limits are found all kinds of tropical trees, among these, in abundance, the red and white quebracho. The red quebracho, like all other trees found in these regions, with the exception of the palm, does not attain a great height, although the trunk is well developed. Of a reddish brown, this wood is heavy and hard, and has tanning qualities which of late years have become highly appreciated in Europe. Formerly quebracho wood was obtained only from the forests bordering on the Parana River, but now transportation by rail is possible, and gigantic sawmill enterprises have been started, which develop the untold wealth of the chaco and send their products to market. It is stated that the tract of country can furnish a fabulous amount of quebracho wood, practically an inexhaustible amount, while the present yearly consumption is but 1,000,000 tons.

Ten years ago the exports of wood from the Argentine Republic aggregated in value \$75,000; during 1892 this value increased to \$1,500,000. Very recently a sawmill has been erected at each of the ten railway stations between Rosario and Beurequiste. The Government allows the privilege of cutting timber within its boundaries, but makes no grants for more than 13 leagues. One league of forest in the vicinity of the railway is worth from \$7,500 to about \$10,000. On the value of the woods arriving at the sea a tax of 3 to 7 per cent is levied. The unlimited supply and low cost of production make quebracho wood one of the cheapest vegetable tanning materials known.

About one hundred blows with an axe and a few hours' labor spent in peeling the bark and sawing the logs, suffice to secure a ton of wood, whereas

it is estimated that about one hundred and fifty working hours are required to supply a ton of oak bark. The grinding and cutting of quebracho wood is naturally a more difficult operation than getting out hemlock or oak bark, but, considering the original cost, this is relatively an unimportant item.

Transportation from the Argentine Republic to Europe can be effected so cheaply that many firms ship their rough lumber to Europe to be worked into extract there.

The red quebracho contains in considerable quantity a red coloring matter, which is hardly soluble in cold water, but will dissolve readily in warm water. For this reason, quebracho extracts, if not properly treated, will impart a reddish tint to leather. Used alone, quebracho extract will only yield a leather of poor color, but when combined with alum and salt it yields finer results even than gambier. Leather tanned with quebracho, alum, and salt has a pale straw-yellow appearance, the flesh side being almost white. In first using quebracho extract, it is important to use much weaker liquors than those needed with other tanning agents.

There are large extract works in Reuners and Benrath, near Hamburg; also in Oberlahnstein-on-the-Rhine and Frankfort-on-the-Main. In these factories, the wood is cut by machines specially built for that purpose. It is cut from the log in two different ways—side and head cut. The side cut is of fine, thin, small chips, up to about 1 inch long, and the head cut consists of smaller and coarser pieces. Quebracho extract is manufactured in crystal and soft paste. The crystal is put up in cases of 150 kilograms (330 pounds) and costs about \$10.75. It contains about 65 to 70 per cent of tannin. The paste is put up in barrels of from 230 to 250 kilograms (507 to 551 pounds) and contains about 45 per cent of tannin.

HENRY F. MERRITT,
Consul.

BARMEN, *September 21, 1895.*

WESTPHALIAN HAMS.

The peculiar and excellent qualities which have made Westphalian hams so famous are attributable to three distinct elements connected with ham making: (1) the hogs of Westphalia are chiefly bred for the express purpose of making the most tender meat and the least fat; (2) the manner of feeding and caring for the hogs is a specialty; (3) preserving, curing, and last of all, smoking the hams with juniper berries and branches is entitled to careful attention.

KINDS OF HOGS RAISED.

There is a special predilection in Westphalia for the raising of the so-called *Ravensberger Kreuzung* (Ravensberg crossbreed). They are rather large animals, with slender bodies, flat groins, straight snouts, and large heads. A special feature of this race is their very big, overhanging ears.

Their skin is white and covered with straight little bristles. Another but smaller species is also raised in Westphalia which is called the *Königsberger Landschwein*. This kind, particularly as far as hams are concerned, is not in great favor. Their flesh is not as substantial as that of the first-mentioned breed. In comparison with the Ravensberg hog, their rind is thick and leathery. These pigs are distinguishable by the short, compact frame of their bodies. The head is short, with straight snout; ears are small and upright. Unlike the Ravensberg sort, this hog has a body almost like a roller, resting upon very short and thin legs. The skin is dark colored, the hair not straight.

MANNER OF FEEDING.

First of all it must be stated that the feeding with acorns, though very much in vogue in Westphalia some time ago, is at present not practicable on account of the inability of the oak woods to produce anything like the amount of mast food wanted. Feeding in the piggery is the only way customary nowadays. The principal component part of swine food in Westphalia is potatoes, which are grown in large quantities. Particularly the smaller varieties are used for this purpose. The potatoes are first well cooked and then, with their skin, mashed in the potato water. The pulp thus obtained is thoroughly mixed with wheat bran or with rye, barley, or oatmeal in a dry, raw condition. An addition of indian corn is not advisable, because this cereal, according to experience, is said to have an undesirable effect on the production of hams. Pork from hogs which had been principally fed with indian corn shows little firmness, is watery, and not adapted for cure.

Proper care should be taken that the food given to the animals is properly cooled, or else complications in the digestion are much to be feared. It is further advisable that the mass of the food is not too thick by the admixture of bran or meal. It must not tumble in thick masses into the food-trough, but should be in a condition to flow thickly into the trough. In order to avoid an overproduction of fat, and, at the same time further the growth of flesh of young pigs, it is good to add some raw-cut green food—cabbage is the best—to the mixture. In many parts of Westphalia, wherever it is practicable, young pigs get much sour milk and prosper splendidly thereon. Pork of animals fed in this way is savory and of fine color.

In order to promote digestion, it is sometimes good to give the hogs small pieces of soft coal, which they eat with lively appetite. It is a matter of course that from time to time pigs must get fresh, clear drinking water.

Much stress should be laid on cleanliness. Hogs require scrupulous cleanliness if they are to prosper. The sty must be airy and allow the animals sufficient mobility. It is good to whitewash the walls every year anew. The floor is to be paved in a way that the watery excrements will flow off directly. Further care is to be taken that the beds are kept as dry as practicable; the litter should therefore be frequently renewed. It is of great importance for the welfare of the animals to water or moisten them

frequently; particularly during the hot season, a weekly thorough cleaning with soap, water, and a hard brush is alike very much advisable, and is the common practice in many places.

If more value is laid upon the production of flesh rather than of bacon, the animals ought to have much exercise in the open air.

PICKLING THE HAMS.

The hams are first vigorously rubbed with saltpeter, and then with salt. In order to prevent the spoiling of the hams, as many cuts as can be prudently made are made near the bone and strewn with saltpeter and salt. The hams thus cured are pressed in a pickle-tun and entirely covered with cold salt lye. According to their size, hams should remain in salt from three to five weeks. After this, the hams are taken out of the pickle and hung up in a shady, but dry and airy, place in order to become "air-dry" (*lufttrocken*).

SMOKING OF THE HAMS.

Before the pickled hams can be put in smoke, it is absolutely necessary that they be first exposed for several weeks to the drying in the open air in the way just mentioned. As long as the outside of the ham is not absolutely dry, as long as it appears moist or sticky, it must be kept away from smoke. Only entirely air-dry pieces must be subjected to this way of conservation. Smoking is done in special large chambers, the hams being hung up on the ceiling. On the floor of the smoking room a suitable quantity of sawdust, wood shavings, and, if possible, an addition of juniper bunches, is slowly charred.

Besides juniper, beach and alder woods are used. Oak and resinous woods are to be positively avoided.

The smoking should go on very slowly. It is recommended to smoke for a few days cautiously—that is, to have the smoke not too strong, then to expose the hams for a few days in the fresh air, repeating this way until the hams have become sufficiently brown. Hams should be actually in smoke two or three weeks, and thus the whole process of smoking will take about six weeks.

In Westphalia much value is set upon dry hams. Hams are therefore preserved after their smoking in a room, which is shady, not accessible to the light, but at the same time dry, cool, and airy.

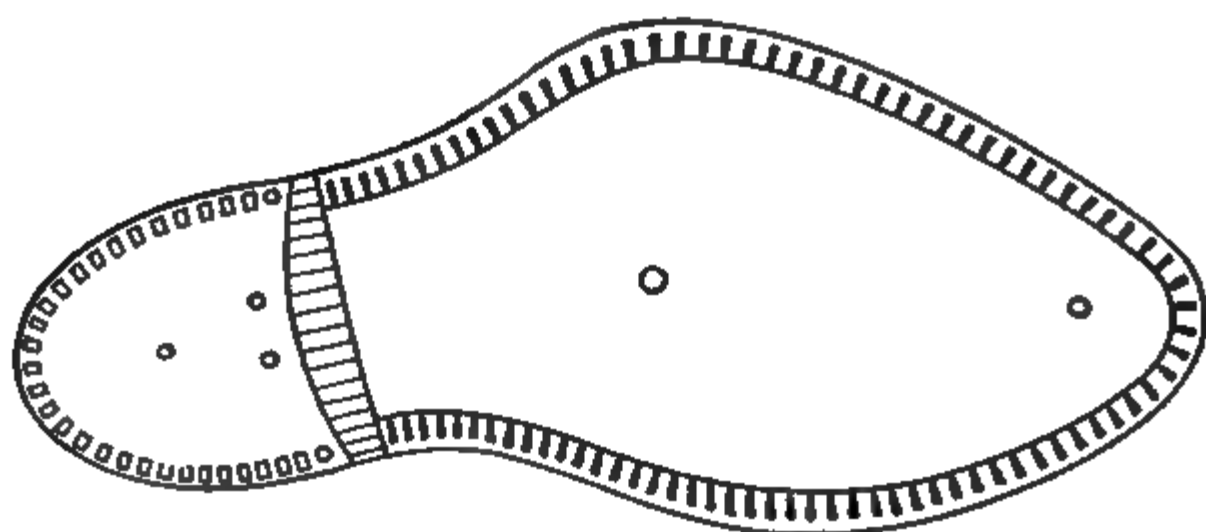
HENRY F. MERRITT,

BARMEN, *September 21, 1895.*

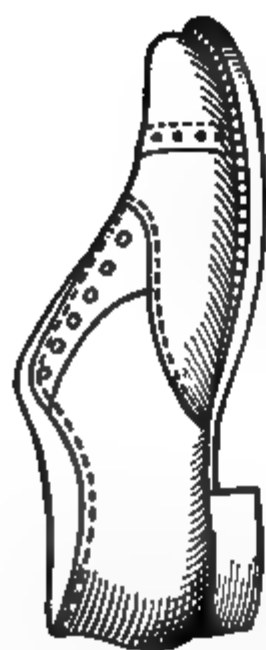
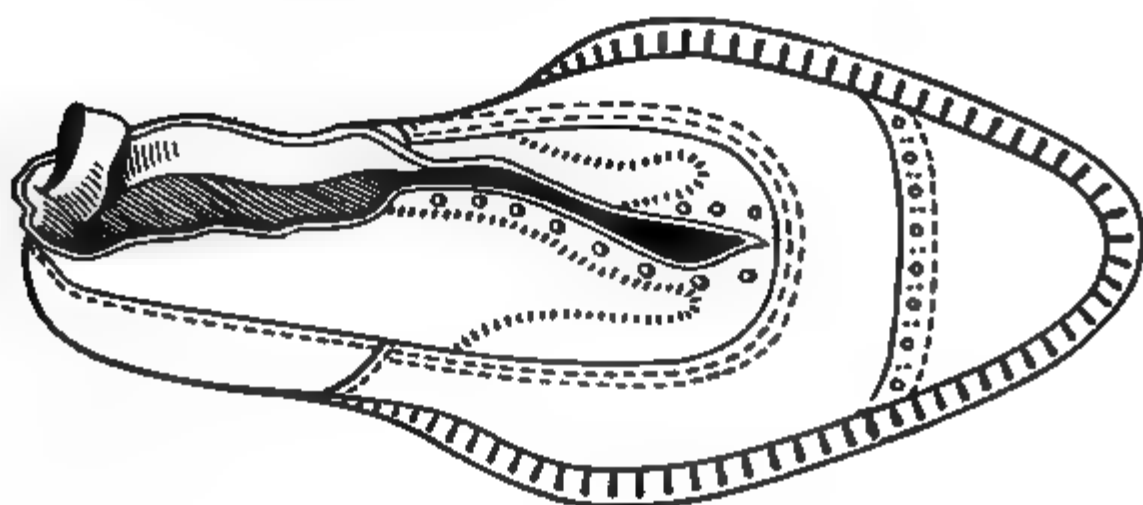
Consul.

AMERICAN SHOES IN IRELAND.

My attention was called recently to an invoice of American boots and shoes for this market, amounting to over \$1,000, which was in the nature of a trial order, and which stipulated that all goods unsold were to be returned at the manufacturer's risk and expense. This trial order was placed in the



GENTLEMAN'S BOOT, SHOWING UPPER AND SOLE



GENTLEMAN'S SHOE.

LADY'S BOOT.

United States in consequence of the protracted strike last spring of the English bootmakers, as the merchants of this city rely largely upon the English manufacturers for their ready-made stocks. The result was a failure, not because of the quality or price of the goods, but because of the styles—they were so different from those to which the trade was accustomed.

The people here are very conservative in regard to change of established tastes and styles, hence, when the American article was offered for sale, there was no demand. The long vamp, narrow heel and sole, pointed toe, and general lightness of the foot wear were unpopular. The majority of the people require a larger boot or shoe than they do in the United States, and they are accustomed to a more substantial looking article, with a broad heel and thick sole, short vamp and box toe, which has a decidedly different cut and look from American foot wear.

This is a moist climate (the rainfall for 1894 was 37.12 inches); hence a heavier and stronger boot and shoe are required than in the drier climate of the United States. The rubber overshoe is not in general use here in sloppy weather as it is in the United States, although it is gratifying to note that within the past two years the sales have nearly doubled, and the American makes are quite as popular as the home article and sell just as readily when the merchant handles them.

The boot and shoe merchants who have had any experience with American goods admit that, for quality and price, they compare very favorably with the homemade article, but the main drawback is the difference in style. In order that these objections may be overcome, American manufacturers who desire to extend their export trade upon a sound foundation, should familiarize themselves with the wants of the trade before undertaking to supply the article. The people's prejudices must be considered. In time they can be overcome by judicious management, just as the opposition to many American articles which once prevailed is now barely perceptible, and a ready market is the rule when quality and price are in their favor; and when appearance is a factor in the salability of the goods, it must also have careful attention, as is proved by the case just cited.

The accompanying drawings illustrate several of the most common and popular styles of everyday ware.

JAMES B. TANEY,
Consul.

BELFAST, *August 28, 1895.*

THE WOOLEN INDUSTRY IN FRANCE.

The report of the permanent custom-house commissioners for 1894 on the textile industries of France, says that the world's production of wool has not advanced during the last year. Indeed, it has diminished slightly. In 1893, the quantity of wool available for commerce in the whole world was

1,012,000,000 kilograms (2,231,055,200 pounds), while the quantity for 1894 was 1,002,000,000 kilograms (2,209,009,200 pounds).

In France, the production of wool has constantly diminished, the number of sheep being, in 1893, 20,275,716; 1892, 21,504,956; 1882, 23,809,433; 1862, 29,529,678; 1840, 32,151,430. It is quite probable that the diminution of the quantity of wool has been equally great.

As to the quality of wools, it does not seem to improve. The objective end of sheep raising in France, which was to create a race equal to the merino type, seems to have had its day. Fortunately, owing to the endeavors of breeders in Champagne, Soissonnais, Vexin, and the Ile de France, a sturdy breed of sheep has been maintained, whose wool is fine and firm. This wool, which for a long time contributed largely toward French industrial revenue, is now diminishing in quantity. During the last fifteen years, the sheep raiser, discouraged by the low price of wool, and more or less stimulated by the high price of meat, has sought to breed animals which should, in the shortest possible time, give the best market value in meat. Twenty years ago a merino produced a net revenue of 10 to 12 francs (\$1.93 to \$2.316) for its wool. To-day the meat of the newer breed is worth 15 to 20 francs (\$2.89½ to \$3.86) more than the merino, viewed as a wool producer, the breeder making from 7.50 to 10 francs (\$1.44¾ to \$1.93) more per head by selling his sheep for meat than he did by selling the wool.

HORATIO R. BIGELOW,

Consul.

ROUEN, *September 9, 1895.*

PREVENTION OF FOREST FIRES.

Now that the question of the preservation of forests from destruction by fire is exciting much concern in a number of the States of the Union, the provisions of the law upon the subject at present in force in the Province of Ontario may prove of interest to the citizens of the United States. I transmit therefore a copy of the full text of the act of the provincial legislature relating thereto, as from its brevity it can not well be epitomized.

JAMES C. QUIGGLE,

Commercial Agent.

COLLINGWOOD, *April 27, 1895.*

ACT TO PRESERVE THE FORESTS OF ONTARIO FROM DESTRUCTION BY FIRE.

Whereas large quantities of valuable timber are annually destroyed by fires, which are in many instances the result of negligence and carelessness, it is therefore necessary to provide stringent regulations for the prevention of such fires; therefore, Her Majesty, by and with the advice and consent of the legislative assembly of the Province of Ontario, enacts as follows:

(1) The lieutenant-governor may, by proclamation to be made by him from time to time, issued by and with the advice and consent of the executive council, declare any portion or part of the Province of Ontario to be a fire district.

(2) Every proclamation under this act shall be published in the Ontario Gazette, and such portion or part of the province as is mentioned and declared to be a fire district in and by the said proclamation shall, from and after the said publication, become a fire district within the meaning and for the purposes of this act.

(3) Every such portion or part of the province mentioned in such proclamation shall cease to be a fire district upon the revocation by the lieutenant-governor in council of the proclamation by which it was created.

(4) It shall not be lawful for any person to set out, or cause to be set out or started, any fire in or near the woods within any fire district, between the 1st day of April and the 1st day of November in any year, except for the purpose of clearing land, cooking, obtaining warmth, or for some industrial purpose; and in cases of starting fires for any of the above purposes, the obligations and precautions imposed by the following sections shall be observed.

(5) Every person who shall, between the 1st day of April and the 1st day of November, make or start a fire within such fire district for the purpose of clearing land shall exercise and observe every reasonable care and precaution in the making and starting of such fire, and in the managing of and caring for the same after it has been made and started, in order to prevent such fire from spreading or burning up the timber and forests surrounding the place where it has been so made and started.

(6) Every person who shall, between the 1st day of April and the 1st day of November, make or start within such fire district a fire in the forest, or at a distance of less than half a mile therefrom, or upon any island for cooking, obtaining warmth, or for any industrial purpose shall (a) select a locality in the neighborhood in which there is the smallest quantity of vegetable matter, deadwood, branches, brushwood, dry leaves, or resinous trees; (b) clear the place in which he is about to light the fire by removing all vegetable matter, dead trees, branches, brushwood, and dry leaves from the soil within a radius of 10 feet from the fire; (c) exercise and observe every reasonable care and precaution to prevent such fire from spreading, and carefully extinguish the same before quitting the place.

(7) Any person who shall throw or drop any burning match, ashes of a pipe, lighted cigar, or any other burning substance, or who shall discharge any firearm within such fire district, shall be subject to the pains and penalties imposed by this act, if he neglect completely to extinguish before leaving the spot the fire of such match, ashes of a pipe, cigar, wadding of the firearm, or other burning substance.

(8) Every person in charge of any drive of timber, survey or exploring party, or of any other party requiring camp fires for cooking or other purposes within such fire district, shall provide himself with a copy of this act, and shall call his men together and cause said act to be read in their hearing, and explained to them at least once in each week during the continuance of such work or service.

(9) All locomotive engines used on any railway which passes through any such fire district or any part of it shall, by the company using the same, be provided with and have in use all the most approved and efficient means used to prevent the escape of fire from the furnace or ash pan of such engines, and that the smokestack of each locomotive engine so used shall be provided with a bonnet or screen of iron or steel wire netting, the size of the wire used in making the netting to be not less than No. 19 of the Birmingham wire gauge, or three sixty-fourths parts of an inch in diameter, and shall contain in each inch square at least eleven wires each way at right angles to each other—that is, in all, twenty-two wires to the inch square.

(10) It shall be the duty of every engine driver in charge of a locomotive engine passing over any such railway within the limits of any such fire district, to see that all such appliances as are above mentioned are properly used and applied, so as to prevent the unnecessary escape of fire from any such engine as far as it is reasonably possible to do so.

(11) Whosoever unlawfully neglects or refuses to comply with the requirements of this act in any manner whatsoever, shall be liable upon a conviction before any justice of the peace to a penalty not exceeding \$50 over and above the costs of prosecution, and in default of payment of such fine and costs, the offender shall be imprisoned in the common jail for a period not exceeding three calendar months; and any railway company permitting any locomotive engine to be run in violation of the provisions of section 9 of this act shall be liable to a penalty of \$100 for each offense, to be recovered with costs in any court of competent jurisdiction.

(12) Every suit for any contravention of this act shall be commenced within three calendar months immediately following such contravention.

(13) All fines and penalties imposed and collected under this act shall be paid one-half to the complainant or prosecutor, and the other half to Her Majesty for the public use of the province.

(14) It shall be the special duty of every crown land agent, woods and forest agent, free-grant agent, and bushranger, to enforce the provisions and requirements of this act, and in all cases coming within the knowledge of any such agent or bushranger to prosecute every person guilty of a breach of any of the provisions and requirements of the same.

(15) Nothing in this act contained shall be held to limit or interfere with the right of any party to bring and maintain a civil action for damages occasioned by fire, and such right shall remain and exist as though this act had not been passed.

FIRE DISTRICTS OF ONTARIO.

District No. 1.—Commencing at a point on the north shore of Lake Huron where Provincial Land Surveyor Albert P. Salter's meridian line between ranges Nos. 21 and 22 west intersects the water's edge, said point being the southwest angle of the township of Plummer; thence easterly, following the turnings and windings of the shore along the water's edge of Lake Huron and Georgian Bay to the mouth of French River; thence southeasterly, along the easterly shore of the Georgian Bay, and taking in Parry Island, to the northwest angle of the township of Matchedash; thence southeasterly along the westerly boundaries of the townships of Matchedash and North Orillia to the southwest angle of North Orillia; thence northeasterly along the southerly boundary of North Orillia to the waters of Lake Couchiching; thence easterly across said lake to the southwest angle of the township of Rama; thence easterly along the south boundaries of the townships of Dalton, Digby, and Lutterworth to the northwest angle of the township of Galway; thence southerly along the westerly boundaries of the townships of Galway and Harvey to the southwest angle of Harvey; thence easterly along the south boundaries of the townships of Harvey, Burleigh, Mehtuen, Lake, and Tudor, to the northwest angle of the township of Elzevir; thence southerly along the west boundary of Elzevir to the southwest angle of said township; thence easterly along the south boundaries of the townships of Elzevir, Kaladar, Kennebec, Olden, Oso, and South Sherbrooke, to the southeast angle of the township of South Sherbrooke; thence northwesterly along the easterly boundaries of the townships of South and North Sherbrooke to the southerly boundary of the township of Lavant; thence northeasterly along the southerly boundaries of the townships of Lavant and Darling to the southeasterly angle of the township of Darling; thence northwesterly along the easterly boundaries of the townships of Darling and Bagot to the northeasterly angle of the township of Bagot; thence southwesterly along the northerly boundaries of the townships of Bagot and Blithfield to the easterly boundary of the township of Brougham; thence northwesterly along the easterly boundaries of the townships of Brougham, Grattan, Wilberforce, and Alice to the waters of the Upper Allumette Lake; thence northwesterly, following the water's edge of

said lake and the Ottawa River to the head of Lake Temiscamingue; thence due north along the boundary between the Provinces of Ontario and Quebec to the northern boundary of the Province of Ontario; thence westerly along the said northern boundary to its intersection with the production northerly of Provincial Land Surveyor Albert P. Salter's meridian line between the said ranges Nos. 21 and 22 west, and thence southerly along said meridian line produced to the place of beginning.

District No. 2.—All that part of the said province lying west of Provincial Land Surveyor Albert P. Salter's meridian line between ranges 21 and 22 west, near Bruce Mines, in the district of Algoma, and west of the said meridian line produced to the northern boundary of the province, the said meridian line being the western boundary of the fire district established by the proclamation of March 27, 1878.

FORESTRY LAWS OF EUROPE.

The Division of Forestry, Department of Agriculture, furnishes the following synopsis of European legislation for the prevention of forest fires:

Measures for the prevention of forest fires fall under two heads—(1) direct laws, usually enacted by the legislature of the particular country; (2) preventive measures, largely official instructions emanating from the forest administration.

I. DIRECT LAWS.

Germany.—See *Forstliche Verhältnisse Preussens*, by Hagen, 1883; *Rechtsverhältnisse des Waldes*, Ganghofer.

The *Strafgesetzbuch für das Deutsche Reich*, May, 1871, in p. 308, prohibits intentional starting of fires in forest and turf moor. P. 309 and p. 310 provide fines for carelessness leading to forest fires. Here come the offenses of setting fires too close to the edge of the woods, smoking in the woods in summer, etc. P. 360 provides fines for those who refuse to assist, if called upon by foresters or other officers, in fighting forest fires. P. 368 provides fines for starting fires in forest and heath lands.

France.—See *Codes de la législation forestière*, A. Puton, 1883, and same title, by Ch. Jacquot, 1866.

P. 148 prohibits the carrying or starting of fire in the forest or closer than 200 meters of its edge. All willful incendiarism is referred to, and settled in the penal courts, based on articles 38, 42, 151, and 202 of code forestier and 434 and 458 of code pénal.

P. 149 provides fines for those who have an interest (*droit d'usage*) in the forest and refuse to help in case of fire. (Code forestier, article 61; code pénal, article 475.)

P. 151 prohibits brickkilns, etc., closer to the forest than one kilometer, without permission.

England (chiefly India).—See *Forest Laws*, by B. H. Baden-Powell, London, 1893; contains considerable bibliography.

The forest act, reserved forests, section 25*b* prohibits setting fire to the forest or kindling, carrying, or keeping alight a fire in dangerous places contrary to rules; section 25*c* prohibits fires except at notified times; section 25*g* prohibits limekilns and other similar manufactures inside the forest. In protected forests, only partly under Government rules, these regulations are much modified. Section 187 of the Indian penal code provides fines for those who refuse to fight forest fires.

Austria.—Building fires in the forest or near its edge is forbidden.

Anyone seeing a fire left burning, is obliged to extinguish the same.

Travelers going along the road must report any fire they may happen to see to the nearest householder, who in turn must report it to the nearest forester or civil officer.

Officials can demand help and have authority to take command in case of fire.

2. PREVENTIVE MEASURES.

These comprise chiefly the cutting of safety strips between the several compartments (also used as roads), special safety belts along railway lines and other exposed positions, etc. Much is also done in way of employing extra guards and laborers in exposed localities at special times. It is apparent, however, that these matters or measures must largely be left to the judgment of the men in charge.

INFANTILE LIFE INSURANCE IN EUROPE.

As the question of infantile insurance is at the present time forcing itself upon the American public, and through it upon the legislatures of the several States, it may not be out of place to draw attention through a consular report to the system as it exists in some of the European countries, which will serve at least to indicate whether infant insurance in its present form is, on the ground of public policy, a good or bad thing.

It has been asserted, perhaps rashly, that the deaths of a large number of infants in England and France are due to their being insured, or, in other words, that children are deliberately murdered for insurance money.

In France, a bonus is paid by some municipalities to the mothers of illegitimate children to prevent, it is said, the clandestine destruction of such children, while the women are yet overshadowed by the primeval sorrow of their sex, and thus preserve the offspring as an ultimate source of strength and wealth to the body politic. But no restriction whatever seems to have been placed upon another and greater possible cause leading to the death of many infants, namely, that of gambling upon the survival of the child by insuring its life with the view to benefit in case of its death. No one can predict the consequences of such evils, which are already recognized in prudent quarters as fraught with great peril to public morals, and which naturally give rise to the opinion that civilization at the end of the nineteenth century is not particularly remarkable for skill, intelligence, or address in dealing with problems of social science.

That the insurance of infants may be a possible cause of their death, can not any longer be doubted. If parents are negligent of their children under any circumstances, the fact that they are insured would tend to act upon an evil mind as a direct inducement for further negligence; or, if an infant is inclined to be sickly, there is an inducement to allow "nature to take its course," which it generally does, if the child has been insured, in a very speedy manner.

In France, it appears that the companies allow policies to be effected by people who have no insurable interest, properly so-called, in the life of the

insured, and I am informed that no discrimination is made against illegitimate children. Indeed, the insurance may be effected by persons who have a direct interest in the death of the insured, such as of illegitimate children, the children of very poor people, or children who, from one cause or another, are a burden to those who have the care of them.

Had the philosopher of Aulus, who declaimed against the "unnatural behavior of wealthy mothers in neglecting to suckle their own children," lived at this time, when men and women of high social position choose their partners for life for the largeness of their fortunes or the glamour of titles, he would perhaps not be surprised at this "unnatural behavior;" or that people in less favored circumstances should at times show so little compassion to their offspring. We can not suppose that there is less temptation to the latter class in regard to the lives of their children than in that of the wealthier classes; for if there is a temptation at all, surely common sense must allow that it is to that class of persons who are least able to support their children.

The mean chances between classes who differ widely in their circumstances, or the averages formed from the mortality which obtains in large classes, are inapplicable for the safe guidance of statisticians. The desideratum is to ascertain in what degree mortality is influenced by the circumstances under which various classes have been placed. M. Villermé, in order to collect satisfactory information of this kind, made a comparison of two districts in Paris—the first district, which contained the largest proportion of wealthy people, and the twelfth, which contained the greatest proportion of poor people. The total difference was such that when fifty died in the first district, one hundred died in the twelfth. There was one birth annually for every thirty-two inhabitants of the first district, and one in twenty-six of the twelfth, and yet there were not more children under five years in the last than in the first—a proof that the poor bring forth more children than the rich, but preserve fewer. But the baneful effects of poverty is most perceptible in the greater mortality among the very young, showing that poverty, neglect, and bad diet, which tend to weaken the general constitution, should always be taken into account as a powerful predisposing cause of mortality among infants or children under five years of age. Statistics gathered by Dr. Granville show that of 876 marriages among the poorer classes there were 3,942 births, or an average of $4\frac{1}{2}$ to each marriage. Of these, 1,676 children, or less than one-half, survived. Among the middle or the higher classes we should not probably have found so many as 3,942 births, but a greater number than 1,676 survivals.

As regards "sickly children," it is stated that they must undergo a medical examination, and that the companies will accept no risk not approved by the medical examiner; but, on the other hand, it is not improbable that the examination is often made in the most perfunctory manner, and it is said that children are sometimes insured whose lives are in a precarious state. The insurance is not infrequently effected by people who have charge

of the child to nurse it for a weekly payment, but such insurances are not effected until there seems a reasonable chance of the child dying, or the payments are in arrears, so that on the death of the child the nurse will be able to recoup herself for the loss out of the insurance money. Again, the agents of the companies are paid by commissions, and though this may be the only practical mode of payment, commercially speaking, it offers a direct inducement for their taking insurances with very little injury.

It is not probable the work could be carried on without such canvassers. They go among the people and persuade them. They say to them, "you ought to be economical and thrifty; you ought to provide for your families," and in this way they set up a propaganda of extravagant thrift. This is shown when we compare the amounts spent in commissions and costs of managements with the amounts of premiums received by the companies during one year. The following table shows the percentage during a prosperous year of several of the large English companies in which infants are insured:

Name of company.	Premiums received.	Commissions and management.	Percentage of premiums paid in commissions.
Workman's Assurance.....	£153,384	£74,317	48.4
Pearl Life Assurance.....	213,631	107,194	50.2
Prudential Assurance.....	2,911,295	1,126,158	38.7
Refuge Assurance.....	349,942	182,055	52
Wesleyan Assurance.....	119,701	65,219	54.5

These figures show that on the average 50 per cent of the premiums are spent in obtaining them, and of the money paid by the insured only one-half is in any year available as assets, the rest going for the benefit of the management. It is estimated that out of over 3,000,000 members one-half are children.

The reason that so many children who are insured do not die is not because insurance is a good thing, but because many parents do not argue the matter at all, but do their duty by their children to the best of their ability without reference to the insurance, which only costs them a few sous per week, but with the evil-disposed it is quite different—the insurance is a direct inducement to neglect and kill their children.

A frequent cause of death in children is what is called "exhaustion from malnutrition," and the method by which this is brought about is so simple that it is no wonder it often occurs. All the parents have to do is to stuff the child with improper food, and the more they give it the weaker it gets. It is impossible in such a case to determine absolutely if such feeding is done purposely or from ignorance; but the impression formed from such cases seems very general that in the majority there is a great deal of method, for although these people may be uneducated, and ignorant of the simplest rules

of dietetics and hygiene, they are quite cunning enough to know that such a course of treatment can be carried out with impunity. Another frequent cause of death among infants is "suffocation" while in bed with their parents. It is said that more than 30 per cent of "accidental deaths" are of children who die in this way, and although this is clearly a preventable cause of death, which with a little care from the parents could be overcome, yet it has been found that a number of children so dying were insured, and the parents were enabled to take advantage of their own carelessness by receiving the insurance money.

The most important point, and the one to be first considered, is the question whether it is in accordance with public policy that infant insurance should be allowed at all. The strongest argument in favor of the practice is that it encourages thrift and induces parents to spend more money in the care of a child while alive than they would do if it was not insured. But where is the evidence of the thrift? The parent is putting by money for which he can get no return unless the child dies, and then the amount paid is wholly out of proportion to the amount invested, and the matter, commercially, assumes a gambling aspect, the stake in the game being the life of the child.

It is further urged in favor of infant insurance that the parent is more likely to provide extra food and delicacies for a child who is insured, as he knows that if it dies he will be able to reimburse himself somewhat by the insurance money. But surely this argument tends directly against the policy of the system, for it must be obvious to any thinking person that if an evil-minded parent argued upon the matter at all he would argue in this manner: "My child's life is insured; if I spend extra money in medical advice and proper food, I may keep my child alive, and so I shall have no benefit from my insurance, and shall have spent my money in premiums to no advantage; but if I neglect to get proper food and advice the child will die, and I shall have saved my money and be in pocket from the insurance."

It is also urged by the friends of the practice that but few cases can be pointed to in which a question of insurance has been proved to be an inducement to murder or neglect. This bare statement is no doubt correct, but that is on account of the extreme difficulty of bringing the matter home to the guilty. In the English courts it has been decided that "it is not sufficient to convict a person for manslaughter by neglect unless the medical man is enabled to state positively that the child's life might have been prolonged by medical aid and other necessities." In such cases, it is impossible to expect a medical man to swear to that which is only at the best a matter of opinion.

With all these difficulties in the way of bringing home to persons the consequences of their neglect or crime, it surely is worthy of the grave consideration of our legislatures whether a system which must hold out an extra inducement to parental neglect and crime, should not be prohibited altogether, or at least placed under the most stringent control.

I have found it very difficult to get specific information on this subject, the insurance companies being apparently unwilling to give out such information, and especially any details. Some of the companies promised to reply in detail to my questions, but have failed to do so.

C. W. CHANCELLOR,
Consul.

HAVRE, *April 19, 1895.*

PRIVATE INSURANCE COMPANIES IN SWITZERLAND.

From the federal insurance commissioner's report for 1893, I extract the following, based, however, on the premium receipts, the total amount of insurance of some branches, as "accident and transportation," being unobtainable.

In 1886, the total premium receipts footed up, in round numbers, 22,000,000 francs (\$4,400,000), while for the year ending December, 1893, 33,782,073 francs (\$6,519,940) were taken in, an increase of 53½ per cent in seven years. To the latter amount must be added 5,890,000 francs paid in premiums to the state and cantonal insurance bureaus for building insurance (which is compulsory in Switzerland and is carried by the State insurance bureau established by the cantonal and State authorities), making a grand total of 39,672,073 francs (about \$7,934,414) paid by the Swiss people in insurance premiums for one year.

These insurance premium receipts were participated in by the different branches of insurance in the following amounts respectively :

Branches.	Amount.	Branches.	Amount.
	<i>Francs.</i>		<i>Francs.</i>
Life insurance.....	18,909,835	Hail insurance.....	456,600
Accident insurance.....	5,031,293	Marine and land transportation insur-	
Fire insurance.....	7,512,980	ance.....	1,608,197
Glass insurance.....	99,269	Total.....	33,782,073
Water-connection insurance.....	10,697		
Cattle insurance.....	153,202		

Of this amount home, or Swiss, companies participated to the sum of 19,400,000 francs (\$3,744,200), while foreign companies, holding concessions to transact business in Switzerland, took in 14,380,000 francs (\$2,775,240).

A striking feature is the fact that the relative proportion of insurance between the home and foreign companies has remained the same in 1893 as it was in 1886, namely, 57.4 per cent for the former, and 42.6 per cent for the latter.

The commissioner, in his report, points to the fact that while the Swiss people have paid 14,380,000 francs (\$2,775,340) to foreign companies in premiums during the year 1893, the home companies have drawn 23,480,000

francs (\$4,531,640) in premiums from foreign countries—thus a good balance in favor of the home institutions and Switzerland has been secured. The amount of premium receipts thus shown is quite large, considering that Switzerland is a small country with a population of little over 3,000,000, and that the rate of insurance on all classes of risks, especially in the line of fire insurance, is much lower than in the United States.

The prevailing rate of fire insurance, on ordinary risks, ranges from 50 centimes (10 cents) to 75 centimes (15 cents) per 1,000 francs (\$193) according to location, on personal property.

EUGENE GERMAIN,
Consul.

ZURICH, *June 8, 1895.*

NEW CUSTOMS REGULATIONS IN MADAGASCAR.

I have the honor to inclose herewith a translation of extracts from a recent decree published here on the regulation of the customs in Madagascar by the French military authorities. Those articles untranslated are immaterial, referring solely to the internal management and personnel of the customs.

To thoroughly appreciate this decree, it will have to be borne in mind that there is no trade, except in provisions (French and English), but what is a reexport trade if we leave out of consideration the rum traffic. Under this decree American cotton will be forced to pay 10 per cent import duty on cost price (with 20 per cent added to cover expenses); then, on reexportation (no market here, hence must be reexported), 10 per cent export duty, and on arrival at Vatomandry, or any other Hova port, 10 per cent on cost price. Thus a bale of American cotton, costing, say, \$35 in New York, would cost at Tamative \$39.20 plus all charges to delivery, and at Vatomandry, via Tamatave, \$47.32 (plus all charges for handling and delivery), against the old rate of \$38.50—an actual loss to our trade of 20½ per cent on cost price, and necessitating a loss of fully 30 per cent in profits, while exports will be almost as heavily encumbered.

I append a copy of the new tariff under this decree in the shape of a table showing export duties in Madagascar, French, and United States currencies. It must be borne in mind that these duties are chargeable after the 10 per cent ad valorem, provided for in article 21, has been collected on the merchandise.

Articles 7, 21, and 28 are particularly worthy of attention. The third paragraph of article 7 is so much at variance with instructions given this consulate in paragraphs 150, 154, and 156 of the Consular Regulations, that the arrival of an American merchantman in this port would place this consulate in a most peculiar position, entirely unprovided for by said Consular Regulations. The third and fourth paragraphs of article 28 are interesting,

especially the fourth paragraph, so utterly at variance with our treaties as with all ordinary procedure. The first paragraph of article 21 is not only very ambiguous in construction, but also in direct opposition to the very point so often maintained against the Malagasy under our treaty—"the right to pay in money or kind at option of importer."

I hear incidentally that there will probably be a copy of this decree published in pamphlet form for general circulation or sale ; if so, I will forward a copy under separate cover.

EDW. TELFAIR WETTER,
Acting Consul.

TAMATAVE, *July 23, 1895.*

DECREE RELATIVE TO NEW CUSTOMS REGULATIONS.

[Inclosure 1 in Consul Wetter's report.]

* * * * *

ARTICLE 7. During the twenty-four hours of arrival and the twenty-four hours before departure every captain, French or foreigner, should deposit, under a penalty of a fine of 500 francs, at the office of the customs, his original manifest, by right of declaration of lading.

The twenty-four hours do not run on holidays. For vessels placed in quarantine, the deposit of the manifest is not exigible until during the twenty-four hours which follow their admission to "free pratique."

The ship's register and clearance papers and the bills of lading shall be deposited at the customs at the same time as the manifest. The ship's register and clearance papers will remain at the bureau until the departure of the vessel. The bills of lading will be delivered up to the captain immediately on verification.

ART. 8. The employees of the customs ought to betake themselves on board of the ship entering and departing. It is enjoined upon the captains and officers of vessels, under penalty of a fine of 500 francs, to receive the overseers, to open to them the cabins, the cupboards, the hatchways, and other outlets to the ship's hold, and to permit them to proceed with the visitations necessary to prevent fraud.

ART. 9. It is prohibited under a penalty of confiscation and a fine of 100 francs to show as a unit, in the manifest, several cases or bales, combined into a single package and in whatsoever manner it may be.

ART. 10. If any merchandise is not included in the manifest, or if there is a difference between the merchandise offered and that declared, the captains will be condemned to pay, independent of a penalty of 1,000 francs, a sum equal to the double duty calculated upon the value of the omitted or different merchandise. If all the packages are not produced, the captain will be liable to a penalty of 300 francs per missing package.

ART. 11. In all cases where from articles foregoing there shall happen to be pronounced a fine against the captain, the vessel can be detained as surety for that fine.

ART. 12. Save in cases of emergency, vessels will be put to discharging by turns on the list following the day of deposit of their manifests and in as large a number as possible. Nevertheless, the packet boats, making a regular postal service, will be set to discharging and lading out of turn.

ART. 13. It is prohibited to discharge from, or embark on board of a vessel, French or foreign, any merchandise or commodity, even that exempt from duty, without written permission of the overseers of the customs and without their presence, under penalty of the confiscation of the merchandise liable to duty and a fine of 100 francs, exigible even for merchandise exempt from duty.

ART. 14. For less than a providential accident, and by a special permit of the customs, no debarkation nor embarkation can be effected, under the same penalty as the foregoing, except in that portion of the harbor designated therefor.

ART. 15. The debarkations and embarkations authorized can be made every day, except Sundays and holidays, from 6 a. m. to 6 p. m.

Nevertheless, steamers can be authorized to work on Sundays and holidays by means of the payment of an indemnification fixed at 15 francs per hour, which will be distributed among the agents of the service (under the title of indemnification for supplementary work).

An exception is made for subsidized mail packet boats, which can work every day.

Every unloading or lading, outside of the fixed hours, will give reason for the confiscation of the merchandise and for the payment of a fine of 100 francs, if it is liable to duty, and solely to a fine of 50 francs if the same is exempt from duty.

The office of the customs will be open from 7 to 10:30 a. m., and from 2 to 5 p. m.

ART. 16. Each lighter or boat shall be provided with a summary declaration or invoice signed: (1) By the captain or officer acting for him at the landing; (2) by the consignee of the ship or of the owner at the landing, making known the number, the marks, and numbers of the packages placed in the said boat or lighter.

ART. 17. As soon as the vessel shall have delivered up its manifest the receivers of the merchandise will be permitted to deposit at the customs the detailed declaration, executed in duplicate, of their merchandise, expressing the nature, kind, quality, weight, measure, or number and value of the merchandise. It will also show the place of lading, the name and nationality of the ship, and the name of the captain.

Every embarkation declaration must be accompanied by a copy of the original invoice, which will remain the property of the customs, and by the original invoice itself and by the bill of lading, which will be surrendered, after verification, to the receiver of the merchandise.

In the margin shall be set down the marks and numbers of the packages—bales, cases, hogsheads, casks, barrels, etc.

ART. 18. Merchandise landed or to be embarked that may be exempt or liable to duty, will be escorted to the office of the customs, to be there submitted to examination, which can not be made but in the presence of the declarers. In case of a refusal on their part to assist, the said merchandise will be considered as an unclaimed (abandoned) article, and sold after one month's storage, previous summons being made to the proprietor to withdraw the same. In case where he should obey the summons, he will have to pay the staying duty whereof mention will be made in article 25.

The baggage of passengers will likewise be escorted to the office of the customs, and will there be subjected to a minute search. The duties must be gathered entirely without regard to the quality or relative value of the merchandise. Nevertheless, the declarer will enjoy the power of choosing.

The absence of the summary declaration will give reason for the application of the penalties decreed in article 20.

Merchandise considered as sound is alone then subjected to integral duty. The remainder is destroyed in the presence of the overseers who set up a *procès verbal* about it.

Sophisticated merchandise, or that containing substances injurious to the public health, will be destroyed by virtue of an order of the director of the customs.

ART. 19. If the declaration is discovered to be false as to the kind or the quality of the merchandise, it will give reason for the following penalties:

(1) Confiscation of the merchandise falsely declared and a fine of 100 francs if the amount of the duties which one would have escaped by the false declaration is 25 francs or more.

(2) A fine of 100 francs solely if the amount of the duties which the false declaration would have caused the exchequer to lose is less than 25 francs.

The merchandise can be detained as security for the fine.

ART. 20. Merchandise can not be removed or landed until after the payment of the duties. The heads of the bureau will take all the necessary steps to prevent fraud. They can, if they deem it suitable, place overseers or guardians on board the ships, entering or leaving, until after their unloading or departure.

ART. 21. The duties will be gathered according to the tariff hereto annexed for exportation, and following a tax of 10 per cent (*ad valorem* for importation, unless the service of the customs judges considers it convenient to gather the 10 per cent in kind).

For those articles subject to a tax (*ad valorem*) the cost price of the merchandise will be augmented by 20 per cent to cover the expenses of commission, insurance, freight, etc.

In case of doubt or dispute as to the manner of understanding or of applying the dispositions of the tariffs, it will be referred to the superior authority.

Receipts will be effectuated by the heads of the bureau, who, by analogy with the receivers, will have the right, under the title of compensation for the responsibility which they incur, to an allowance on the amount of the receipts. This allowance will be calculated in the following manner: Fifty per cent on the first 200,000 francs; 25 per cent on 200,001 francs and beyond.

ART. 22. Prescription is acquired by the customs against any claim to restitution of duties, after a delay of one year, beginning with the day when the duty has been gathered.

The customs is charged toward the debtors, for two years after the expiration of each year, with the custody of the receipt and other registers of the said year, without power to be held to produce them.

Prescription is acquired by debtors for the duties which the employees should have neglected to call for after an interval of six months beginning with the day when these duties were exigible. No interest is due to the customs for the duties which the debtors are backward in paying, nor by the customs for such as it has reason to give back again.

* * * * *

ART. 25. Merchandise liable to or exempt from customs duties will pay a staying duty of 5 centimes (1 cent) per package per day, if they are not removed within eight days of their coming ashore. A special order will indicate the service which will benefit by this receipt. Merchandise liable to or exempt from duty, deposited in the warehouses of the customs, which are not removed within five days, will pay a staying duty of 10 centimes (2 cents) per package per day; without that the customs become responsible for theft, loss, or damage supervening during the durance of this deposit. This receipt will go to the customs.

ART. 26. No merchandise can be transported but by virtue of a permit from the customs and in the presence of the agents, under penalty of the confiscation of the transported merchandise and of a fine of 100 francs if it is liable to duty, but solely of a fine of 50 francs if it is exempt from duty.

ART. 27. Merchandise to be embarked will be made the object of a detailed declaration, executed in duplicate, containing the same indications as that prescribed in article 15. The penalties decreed by article 16 are applicable to embarkations.

ART. 28. Before being dispatched by the customs, the captain must certify that he has taken the mail packet, and the management of the harbor will not authorize him to set sail but upon presentation of a certificate of nonopposition delivered by the service of the customs.

The customs ought not to pay deference to protestations formed to the return of the papers on board the vessels about to depart, but so much as the said protestations shall result from an order of the director of the customs.

In case of a vessel which shall be shipwrecked, the employees of the nearest bureau of customs are expected to repair, without delay, to the spot and to inform, at the same time, the authorities charged to provide salvage.

Merchandise saved will be, as much as can be done, put in a secure place. An inventory will be set up, and in case of reexportation it will be subject to the payment of the existing import duties.

ART. 29. The overseers are under the safeguard of the law. All persons are prohibited from injuring or maltreating them, and even to disturb them in the exercise of their functions under penalty of a fine of 500 francs and under such other penalties as shall thereunto belong, according to the nature of the offense.

The gendarmery and the forces of the police are held to lend their assistance on the first requisition.

ART. 30. Contraventions in point of customs will be proven by *procès verbal* established in the regulated form.

The chief of the bureau of customs is authorized to transact them. The transaction will not be definitive until after the approval of the director of the customs.

Merchandise seized will be placed on sale as soon as the director of the customs shall have decreed it.

The product of contravention and the products of transactions (these latter in the portion exceeding the duties) will be distributed as follows: Forty per cent to the drawer-up-of-the-statement's agent; 5 per cent to the receiver; 55 per cent to the fund for receipts.

ART. 31. All orders contrary to the present orders are abrogated.

ART. 32. The director of the customs and the chief of the bureau of customs, the director of the port and the chief of the postal service are charged, each in as far as him concerns, with the execution of the present order, which can always be modified by decree of the commandant in chief and which will be brought to the knowledge of the trade and be applicable to the bureaus of Tamatave, Majonga, and Maroway the day following the posting up of this notice.

EXPORT DUTIES.

[Inclosure 2 in Consul Wetter's report.]

New exportation duties of Madagascar, which went into force July 11.

Articles.	Unit on which duty is collected.	Duty.	
		Francs.	
Beans	220.46 pounds (100 kilograms)...	3.20	\$0.618
Beef:			
Salted.....	.....do.....	3.10	.598
Cattle, live.....	Head.....	15.00	2.895
Fat (tallow).....	220.46 pounds.....	6.00	1.158
Caoutchouc (rubber).....	.....do.....	12.00	2.316
Chickens, live.....	Dozen head.....	.75	.145
Coffee.....	220.46 pounds.....	16.00	3.088
Ducks, live.....	Dozen head.....	.75	.145
Manille, live.....	.....do.....	3.00	.579
Dry bones.....	220.46 pounds.....	.50	.097
Ebony	Ad valorem.....	10 per cent.	10 per cent.
Fish, dry salted.....	220.46 pounds.....	3.65	.704
Geese, live.....	Dozen head.....	3.00	.579
Ginger	220.46 pounds.....	4.10	.791
Guinea fowls, live.....	Dozen head.....	.75	.145
Goats, live.....	Head.....	.75	.145
Gum copal.....	220.46 pounds.....	12.00	2.316
Hats, straw.....	Hundred	2.50	.483
Hides:			
Dry.....	.....do.....	25.00	4.825
Green	220.46 pounds.....	25.00	4.825
Hogs, live.....	Head.....	2.50	.483
Hogs' lard.....	220.46 pounds.....	12.00	2.316
Horns, ox.....	Hundred .....	.75	.145
Maize.....	220.46 pounds.....	3.10	.598

New exportation duties of Madagascar, which went into force July 11—Continued.

Articles.	Unit on which duty is collected.	Duty.	
		Francs.	
Mamoc, fresh.....	220.46 pounds.....	0.50	\$0.097
Manive, powdered.....	.....do.....	2.00	.386
Mats, small.....	Hundred	2.50	.483
Palissander (wood).....	Ad valorem.....	10 per cent.	10 per cent.
Planks, rough.....	.....do.....	10 per cent.	10 per cent.
Potatoes.....	220.46 pounds.....	3.10	.598
Sweet.....	.....do.....	.50	.097
Rice:			
Unhulled.....	.....do.....	.80	.154
White.....	.....do.....	1.50	.29
Rofia.....	.....do.....	2.20	.425
At Tamatave.....	.....do.....	3.20	.618
Sacks, straw.....	Thousand sacks.....	6.25	1.206
Sadjoas (earthen pots).....	Dozen.....	1.55	.299
Saffron	220.46 pounds.....	.50	.097
Sheep	Head .....	.75	.145
Tobacco:			
Leaf.....	220.46 pounds.....	5.00	.965
Powdered .....	.....do.....	7.00	1.351
Turkeys, live.....	Dozen head.....	3.00	.579
Wax, bees'	220.46 pounds.....	20.00	3.86

NORTH SEA-BALTIC CANAL.

In reply to Department instruction of July 25, 1895, regarding statistics of the North Sea-Baltic Canal [officially known as the Kaiser Wilhelm Canal], I have the honor to report that there can be no answer to the questions as to the relative proportion of cost to Prussia, and that much already published relative to this portion of the subject has been erroneous.

The actual cost of the canal to Germany and Prussia is hard to arrive at. Trustworthy statistics may never appear. The official figures can hardly be hoped for earlier than 1897.

As to the preliminary arrangements for payment of costs between Prussia and the German Empire, on March 16, 1886, the late Emperor William I signed a law that a canal from the mouth of the Elbe through Rendsburg into the Bight of Kiel, large enough to pass ships of war, should be provided for in the sum of 156,000,000 marks (\$37,128,000), of which sum Prussia was to pay down at once 50,000,000 marks (\$11,900,000), leaving 106,000,000 marks (\$25,228,000) to be met by the Empire at large. The Prussian side of the agreement, signed by William I as King of Prussia, bears date July 16, 1886.

A better idea of the Kaiser Wilhelm Canal, so far as the facts are now available, can be obtained by reading or having translated the two German works I have the honor to forward. One is *Geschichte des Nord-Ostsee-Kanals*, by Carl Løwe, folio, with twenty-five plates; the other *Zoll und Steuer Wesen: Zollregulativ für den Kaiser Wilhelm Kanal*, quarto sheets,

fourteen pages, published as extra by the Central Blatt für das Deutsche Reich.* No other publications are worth sending.

Among the anomalies of the present management of the canal, is a refusal to permit the passage of live cattle, a refusal aimed at Sweden, Norway, and Denmark, and apparently in connection with the endeavors of Germany to keep foreign cattle out of the country in the interests of native breeders. The anomaly consists in preventing the transit of Scandinavian cattle to other countries. Perhaps this rule may yield to arguments, since it seems to rest on the ruling of some subordinate.

Foreign captains and merchants have complained of vexatious conduct on the part of officials and unnecessary delays, but probably these complaints are no more than the surprise foreigners often feel at the peculiarities of North German officials. The latter are a class by themselves and require a long acquaintance before their ways of thought and action can be understood. An intention to harass or vex users of the canal is not likely; certainly, the chiefs of the enterprise have entertained no such idea.

The thought of a canal between the Baltic and North Sea is an old one; Duke Adolph, of Holstein, in 1571, begged his suzerain, the Emperor of Austria, to give him permission to establish one. Many pamphlets were written in the early part of the century advising different routes, but it was not till Mr. Hansen, of New York (promoter) of Danish descent, addressed the Prussian Government October 22, 1858, that the project began to take on reasonable shape. Hansen never succeeded in getting his plans adopted, but his agitation of the idea during the next twenty years had the effect of keeping the matter before the public. Field Marshal von Moltke was against it, but Emperor William I and Bismarck at last put it through, and the old Emperor was able to be present at the inauguration shortly before his death.

There can be no reasonable doubt that the rates of tariff for the canal have been placed too high. Lately, many influential papers have so asserted, startled by a statement that during the coming winter rates were to be advanced 25 per cent.

CHARLES DE KAY,
Consul-General.

BERLIN, *August 29, 1895.*

COTTON FACTORIES IN BAHIA.

The most important cotton factory in Bahia (when complete, the largest in Brazil), I am told, is the Emporio Industrial do Norte, a stock company with a paid-up capital of about \$1,600,000. The building is about 900 feet long by 275 feet wide, fronting on the bay—a very pretty and healthy location. It is a one-story structure, built of brick and stone, with a tile roof and fireproof. It is designed to contain 2,000 looms, of which one room will

* Both books are filed in the Bureau of Statistics, Department of State.

contain 1,200 for weaving calicoes, light domestics, etc., and another room 800 for colored cloths, cotton checks, stripes, heavy cottonades, etc.

The building, engines, etc., are complete for the full number of looms, but at present there are only 720 looms in operation, 470 in the light-goods room and 250 in the heavy, or colored, goods room.

The company expect to have the full number of 2,000 looms in operation within the next year. They are constantly receiving and putting up machinery, all of which was purchased in Europe, most of it in England. There is no spinning; the yarn is imported from England.

The boiler house contains five boilers aggregating 700 horsepower. The chimney is 170 feet high and 6 feet in diameter. There are two engine houses, each containing a compound surface condensing engine of 300 horsepower.

They have a complete plant of finishing machinery, at which all colored goods produced are finished.

They are building a commodious wharf in front of the factory for the convenience of transporting their goods.

The mills at present employ about 450 hands, who earn from \$2 to \$9 a week. The working hours are from 7 a. m. to 6 p. m., with one hour off at noon. The present production is about 150,000 yards of cloth per week.

The company have also built about 300 artisans' dwellings, on the English plan, *i. e.*, a separate dwelling for each family—living room and kitchen on first floor and two bedrooms on the second floor. Each dwelling has a water-closet with automatic flushing arrangement, which flushes every twenty or twenty-five minutes, the sewage being discharged into the sea. Fresh-water pipes from the city reservoirs are laid in the streets, with fountains, from which water can be drawn at liberty. The company let these houses to their operatives at the low rental of about 50 cents per week.

The foremen, engineers, and machinists are foreigners (English, German, and French), and get more wages in proportion than the natives.

This factory has all the latest and most approved machinery and appliances, and the building is most admirably adapted to this climate.

The following-named cotton factories, viz, Conceição, San Salvador, Penha, Quemada, Modello, and San Carlos, were owned until a few years ago by separate individuals, when they consolidated and organized a stock company under the title of A Companhia União Fabril da Bahia, with a capital of about \$880,000. According to the company's statement for last year, the six factories together consumed 2,228,600 pounds of raw cotton. They import all fine yarn from England. They produced 282,500 pounds of cotton thread and 4,631,500 meters of cloth in grades from light shirtings to heavy cottonades and some hundred dozen towels and bed spreads. The company have enlarged and improved several of the factories within the last year, and are making some further improvements.

The Companhia Progresso Industrial da Bahia is a stock company with a capital of about \$1,600,000. They own two cotton factories (São Braz and

Bomfin), which have about 8,000 spindles and 208 looms. They make similar grades of cloth to that made by the other companies. This company also own and operate a boot and shoe factory in which they employ about 800 hands.

All the factories mentioned above are in the city of Bahia.

In the city of Valencia, about 50 miles south of Bahia, there are two cotton factories, viz, the Nossa Senhora do Amparo, and Todos of Santos, owned and operated by A Empresa Valencia Industrial. This company's original capital was about \$450,000. The two factories have together about 11,000 spindles and 280 looms.

All the factories employ some foreigners as foremen, engineers, machinists, experts, etc., but most of the operatives are natives who earn from \$2 to \$9 a week, working from 7 a. m. to 6 p. m., with one hour off at noon for lunch.

According to statements, all the factories have heavy advance sales for their productions and are making money. Their stock is quoted very much above par.

R. P. McDANIEL,
Consul.

BAHIA, *May 1, 1895.*

SALT INDUSTRY OF VENEZUELA.

Salt being one of the principal products of Venezuela, the following report with reference to the manufacture, production, and exportation of this article of commerce may prove interesting. The salt pans are located along the shore, and were formerly in charge of the government of the several States, but in the year 1873 they conceded their rights over them to the Federal Government for a certain annual sum in proportion to the amount produced by each. The Government administered the works for a time with its own employees, but afterwards made contracts with private individuals for carrying on the same, with the understanding that they should pay the sum of 4,500,000 bolivars (\$868,500) for each six years. This system was abandoned as unprofitable and a superintendent of works was named, who had to deliver to the Government 50 per cent of the money received, retaining the balance for his expenses and profits.

On the 15th of March, 1893, the Bank of Venezuela took charge of the industry as general administrator for the Government, receiving as a commission 10 per cent of the net proceeds.

The principal salt works of the Republic are located in the sections of Nueva Esparta (Island of Margarita), Cumaná, Barcelona, Maracaibo, and Coro.

To the Islands of Nueva Esparta belong the most important works, at Coche, which are the largest, and at Pampatar. The Coche works are on

the island of that name, which was formerly famous for its pearl fisheries. The pans measure 1,544 meters (5,065 feet) in length by 820 meters (2,687 feet) in breadth and are 1 meter (39.37 inches) in depth. They are separated from the sea by a strip of land 800 meters (2,625 feet) broad, transversed by a channel for the introduction of sea water. In January and February the crystallization begins, and in March or April the collecting of the salt takes place, the crust then being about 10 centimeters (3.937 inches) in thickness. This work lasts for five or six months.

At Pampatar, the pans measure 2,000 by 600 meters (6,562 by 1,968 feet), but the product is inferior to that of Coche, and the pans are not in operation.

The works in the section of Cumaná, the second of importance, are at Araya, and are very large, measuring about 5 kilometers (3.16 miles) in length by 1 kilometer (0.6214 of a mile) in breadth, being a natural depression, which has been worked since the discovery of the continent, and, it appears, by the Indians in pre-Columbian times. The Spaniards had here several fortifications, which were attacked on various occasions by the English and Dutch. The salt is rather dark in color, but is reputed to be of a very good quality.

A short distance from Carúpano, there are the salt works of Areo, producing a salt of fair quality. This pan, however, has been abandoned on account of its small production.

On the coast of Barcelona, there are several works of little importance, the larger ones being at Unare and Casanare.

In the section of Maracaibo, there are a great number of pans, some of them being private property, the owners of which are obliged to submit to the conditions fixed by the Government for the sale of salt.

In the State of Falcon, are to be mentioned the works of Los Tagues, Mitare, and El Guaranao, while at many other points the salt is not even collected.

Finally, in the State of Carabobo, there are several places where salt is collected, Goigoara producing a very white and good article that has occasionally been exported.

The production of salt during the year ending June 30, 1894, was, according to the returns of the Bank of Venezuela, as follows in kilograms of 2.2046 pounds each :

Works.	Quantity.	Works.	Quantity.
	<i>Kilograms.</i>		<i>Kilograms.</i>
La Guayra.....	4,262,856	Salt on hand, July 1, 1893.....	4,630,891
Juan Griego (including Porlamar).....	2,954,950	Amount made during the year.....	17,036,876
Maracaibo.....	2,148,760	Total.....	21,667,767
Puerto Lucre.....	1,935,095	Salt sold.....	17,935,200
Puerto Cabello.....	1,932,320	Salt left over	3,732,567
La Vela.....	796,990	Salt lost at works on account of rain.....	839,200
Guanta.....	637,515	Balance on hand June 30, 1894.....	2,893,367
Carúpano.....	49,895		
Total.....	14,718,381		

Salt is sold at the several works through a permit issued by the custom-houses, at the rate of 10 centimos of a bolivar (about 2 cents) per kilogram (2.205 pounds), when for home consumption, and at 2½ centimos when for export, which, however, takes place only to Colombia. This salt pays the full tax.

The present system of conducting the works proves to be much more economical than any former one, as can be seen from the following comparison:

Year.	Expense of production.	Net gain.
	<i>Per cent.</i>	<i>Per cent.</i>
1884-85.....	62	38
1885-86.....	57½	42½
1886-87.....	53	47
1887-88.....	50	50
1888-89.....	50	50
1889-90.....	50	50
1890-91.....	35	65
1891-92.....	35	65
1892-93.....	31	69
1893-94.....	29	71

The whole population of this Republic being about 2,500,000, and the annual production of salt, as shown before to be about 18,000,000 kilograms, it results that the consumption per head is nearly 7 kilograms (15.4 pounds) per annum.

The retail price of unrefined salt in this market to-day is about 7 cents per kilogram (2.2046 pounds), and when purchased at wholesale, about 5 cents per kilogram.

The following statement of the cost of 1,000 fanegas of salt of 300 pounds each, from the works of Coche or Araya may be of interest:

	<i>For home consumption.</i>	Bolivars.
Collecting 1,000 fanegas, at 2.25 bolivars per fanega.....		2,250
Customs tax on 138,000 kilograms at 10 centimos.....		13,800
Transit duty on 138,000 kilograms at 4 centimos.....		5,520
Freight to La Guayra at 2 bolivars per fanega.....		2,000
Breakwater charges at 1 bolivar per 100 kilograms.....		1,380
Total.....		24,950

Or, 24.95 bolivars (\$4.82) per fanega of 138 kilograms (304 pounds).

	<i>For export.</i>	Bolivars.
Collecting 1,000 fanegas at 2.25 bolivars per fanega.....		2,250
Customs tax on 138,000 kilograms at 2½ centimos.....		3,450
Transit duty on 138,000 kilograms at 4 centimos.....		5,520
Total.....		11,220

Or, 11.22 bolivars (\$2.17) per fanega.

From the foregoing figures, it can be seen that Venezuelan salt can never enter into competition with that of other countries, the expense of collecting and the customs tax making it too dear. It is therefore not to be expected that any notable exportation of salt will ever take place, and if the population does not increase more rapidly, and better roads of communication be established, or industries be introduced which require large quantities of salt, the amount of 18,000,000 kilograms per year as the amount consumed will hardly become much larger.

For the foregoing statistics and much of the information contained in this report I am indebted to the Bank of Venezuela, of this city, which has just published a work on salt as a supplement to the report of the Minister of Finance for 1895, a copy of which I transmit under separate cover.*

R. M. BARTLEMAN,
Secretary of Legation.

CARACAS, *May 13, 1895.*

GERMAN EMIGRATION.

As a supplement to my report on "A German View of American Immigration," † it may perhaps be of interest to have the facts and figures detailed pertaining to German emigration as a whole during several decades. The Year Book of Statistics for the German Empire (1895), just issued, contains official data in regard thereto, and I append the statistical tables in question.

German emigration to various countries.

Year.	United States.	Brazil.	Central and South America.	Australia.	Africa.	Asia.
1875.....	27,834	1,387	488	1,026	1	37
1876.....	22,767	3,432	858	1,226	54	31
1877.....	18,240	1,069	568	1,306	750	31
1878.....	20,373	1,048	634	1,718	394	50
1879.....	30,808	1,630	561	274	23	31
1880.....	103,115	2,119	761	132	27	36
1881.....	206,189	2,102	1,162	745	314	35
1882.....	189,373	1,286	1,588	1,247	335	40
1883.....	159,894	1,583	1,716	2,104	772	50
1884.....	139,339	1,253	2,063	666	230	35
1885.....	102,224	1,713	2,331	604	294	72
1886.....	75,591	2,045	1,398	534	191	116
1887.....	95,976	1,152	1,555	500	302	227
1888.....	94,364	1,129	1,922	539	331	230
1889.....	84,424	2,412	2,243	496	422	262
1890.....	85,112	4,096	1,607	474	471	165
1891.....	108,611	3,710	1,937	438	599	97
1892.....	107,803	779	2,654	376	476	120
1893.....	75,192	1,169	7,194	261	586	146
1894.....	34,210	1,283	2,549	225	760	151

* Filed in Bureau of Statistics, Department of State.

† Published in CONSULAR REPORTS No. 177 (June, 1895), p. 265.

During the twenty years, the German emigration to the United States numbered 1,781,349 souls, more than 90 per cent of the entire number emigrating from the German Empire. It is interesting to observe that the efforts made by the German Government to turn the tide of emigration toward the German colonies in Africa have until now met with but little success, and that the United States, notwithstanding the material decrease in German immigration, still constitute the goal to which the great majority of German emigrants turn.

LOUIS STERN,
Commercial Agent.

BAMBERG, *July 15, 1895.*

THE GERMAN EXPORT TRADE.

The increase of the German export trade in the current year appears very plainly in the provisional estimate published in the latest number of the Trade Statistics for Imports and Exports during the first half of the year 1895. The value of the exports (without the precious metals) for the six months was \$365,187,200, while during the same period of last year they only amounted to \$325,917,200, so that there has been an increase of \$39,270,000, or more than 10 per cent. This has been chiefly caused by the increased exports of manufactures, among which the following classes of goods share most largely :

Articles.	1895.	1894.	Increase
			<i>Per cent.</i>
Cotton goods.....	\$18,992,400	\$16,279,200	16
Silk goods.....	14,446,600	11,305,000	27
Woolen goods.....	21,277,200	19,301,800	10
Aniline dyes.....	7,187,600	5,878,600	21
Various chemical products.....	3,760,500	2,737,000	37
Iron and hardware.....	31,582,600	29,512,000	7
Instruments and machines.....	15,874,600	14,422,800	10
Copper and copper goods.....	7,401,800	6,283,200	17
Leather and leather goods.....	17,040,800	14,589,400	16
Paper and paper ware.....	11,067,000	9,900,800	11
Sugar, raw and refined.....	31,106,600	21,396,200	45

These eleven groups show a total increase of \$28,000,000. This will probably appear still greater in the final estimate, as the provisional estimate is based upon the average prices of the year 1894, which are exceeded in the current year in the case of many important goods.

Favorable as this increase of the German export trade may seem, it must not be overlooked that the year 1894 showed, on the whole, very unfavorable results. In spite of the considerable increase on last year, this year's export trade in several articles, especially in some prominent articles

of the silk and woolen industries, has not reached the level of 1893. On the other hand, several of the greatest industries, *e. g.*, the chemical industry, the iron and machine industry, and the leather industry, show amounts which exceed those of all former years for the corresponding period.

THEODORE M. STEPHAN,
Consul.

ANNABERG, *August 1, 1895.*

SUPPRESSING SWINE PLAGUE IN LUXEMBURG.

I transmit herewith a copy and translation of an official decree for the suppression of the swine plague, which now prevails in Luxemburg. This decree appears in the Luxemburg Zeitung of July 31, 1895:

In view of the fact that, in various parts of the country erysipelas, swine pest, and swine plague are at present prevalent, it seems proper to most speedily adopt measures to hinder the spreading of these diseases. The government in council decrees: Every owner or holder of swine is under obligation to report at once to the local authorities the outbreak of erysipelas, swine pest, and swine plague among his hogs, as well as the appearance of symptoms justifying the fear of the outbreak of such diseases; at the same time he must separate the healthy hogs from the sick or suspected ones, and in such manner shut them up and isolate them as to restrict as far as possible the danger of contagion.

If the summoned veterinary surgeon confirms the outbreak of one or another of these diseases, the quarantine shall remain in force for all swine which have occupied the same stall, even if only a single one of them is sick.

This measure may be extended by the veterinary surgeon to an entire vicinity, or even to an entire township, when the disease is spreading or threatens to spread. In case the quarantine is extended to an entire township, the importation, exportation, and transit of swine is forbidden in such township; in like manner, it is forbidden to bring swine to markets held there.

But it is permitted to bring in hogs for immediate consumption, provided (1) they are at once inspected by the inspector of the district, and (2) that they are subsequently slaughtered within twenty-four hours.

The transportation must be either by railway or in wagons. The slaughtered meat must be stamped by said inspector, and the refuse matter must be used or destroyed on the spot.

The pasturing of mixed herds, or of those belonging to one individual, as well as of single swine, is likewise forbidden.

Diseased and suspected swine must, as far as possible, be attended to by one and the same person. Separate troughs and utensils must be used for the diseased and infected animals.

Admittance to the swine stalls is forbidden to everyone who has not the permission of the owner. The official veterinary surgeon of the district, as well as the person needed for this purpose, are exempted from this prohibition.

Whenever a hog dies, the owner must at once report the death to the mayor or to the gendarmerie. The corpses must be buried at the depth of $1\frac{1}{2}$ meters (5 feet) in places to which other hogs have no access; these places must be distant at least 100 meters (110 yards) from every dwelling and from every path or highway. The corpses must be taken in wagons to the place of burial. The burial must take place under the supervision of the gendarmerie or of an agent of the local police. In no case and under no circumstance is it permitted to throw the corpses or swine refuse of any sort whatsoever into stagnant or flowing water.

The above restrictions cease to apply if, in case of erysipelas, no new case appears within eight days subsequent to the cure or the death of the sick animals.

For swine pest and swine plague, this set term amounts to twenty-one days.

The disinfection of the stalls, as well as of all objects which come in contact with the swine, or which have been used by them, must be effected in accordance with the instructions of the veterinary surgeon and under his supervision.

The manure, excrements, and straw must be buried deep or destroyed by fire.

Violations of the foregoing provisions will be punished by imprisonment of from one month to two years and a fine of from 100 to 2,000 francs (\$19.30 to \$386). One or both of said penalties may be imposed.

None the less do the penalties threatened in Article 319, etc., of the penal code still continue in force for the cases mentioned therein.

The quarantining of a township will, when requested by the veterinary surgeon, be brought to the knowledge of the inhabitants by publication and by the posting of notices. The posted notices must repeat the instructions given in the present decree.

GEORGE H. MURPHY,
Vice-Commercial Agent.

LUXEMBURG, *August 1, 1895.*

SUPPLEMENTARY REPORT.

Under date of August 23, Vice-Commercial Agent Murphy supplements the foregoing by the following:

The Prussian Government president at Trier has decreed that no horses, ruminants, or swine can be imported from Luxemburg into Prussia without first having been examined by a Prussian official veterinary surgeon. Furthermore, the importation of any of these animals is absolutely forbidden except at five specified places (Karthaus and the bridges at Remich, Wasserbillig, Echternach, and Roth); and, even at these places, the importation can be effected only on one or two days in the week between 3 and 6 p. m. at Karthaus, 12.30 to 5 p. m. at Remich, 1 to 5 p. m. at Wasserbillig, 11 a. m. to 4 p. m. at Echternach, and 2 to 5 p. m. at Roth.

The following is the tariff of fees for the examination of animals by Prussian veterinary surgeons: For each horse, 3 marks (71 cents); for each cow, bull, or ox, 1.50 marks (36 cents); for cattle less than 2½ years old, each, 1 mark (3.8 cents); for calves and swine, each, 20 pfennigs (5 cents); for each sheep, 10 pfennigs (2½ cents); for each lamb and young pig, 5 pfennigs (1¼ cents).

LABOR LEGISLATION IN LUXEMBURG.

The new law of July 12, 1895, provides that wages must be paid in such metallic or paper money as is current in the Grand Duchy of Luxemburg. Payments in any other form are null and void.

With the exception of a few copper coins and bank bills, Luxemburg has no currency of its own. The money used is either German, French, or Belgian. Employers may, however, furnish lodgings and land to their employees, debiting their wage accounts for the amount of the rent. They

may also supply them at cost price with tools and such materials as custom or agreement requires the employee to furnish, and with food, clothing, and combustibles. Furthermore, deductions amounting to not more than one-tenth of the wages due may be made for (1) fines incurred by breach of rules conspicuously posted in the establishment; (2) damages occasioned by the employee's fault; (3) assessments due by the employee to insurance and other beneficial funds; (4) money paid in advance to the employee; or, (5) taxes due by the employee. No deduction can be made for alcoholic drinks furnished to the employee.

The payment of wages in saloons, barrooms, stores or shops, or in rooms connected therewith, is forbidden.

Wages must be paid to the employee at least twice a month, at intervals of not more than sixteen days. For job and piecework, payments must be made at least once a month.

Employers are forbidden to secure by contract or to impose upon employees conditions calculated to deprive them of the right to dispose freely of their wages.

An employer who contravenes any part of this law will be punished by a fine of from 50 francs (\$9.65) to 2,000 francs (\$386).

This law, however, does not affect agricultural laborers, servants, or employees of any kind who live with and are fed by their employers.

Another law, that of July 19, 1895, provides that when the wages of employees do not exceed 6 francs (\$1.16) per diem, of the total amount due not more than one-fifth can be ceded to another person and not more than one-tenth can be seized. When they exceed the sum mentioned, not more than two-fifths can be ceded and not more than one-fifth seized. Every stipulation to the contrary is null and of no binding force.

The amount which the law of July 12, 1895, permits the employer to deduct from the wages is not to be confounded with the cessible and seizable parts referred to above.

GEORGE H. MURPHY,
Vice-Commercial Agent.

LUXEMBURG, *August 7, 1895.*

BRITISH AND AMERICAN CONSULAR REPORTS.

The United States consular service, in a certain way, is, at this time, being held up to public view in England as a model after which the English Government should copy. This compliment comes not from mere tyros or theorists, but is bestowed by the most eminent authority in the United Kingdom on commercial matters, namely, the executive council of the Association of Chambers of Commerce.

While a respectable and influential portion of the United States press is criticising our own consular service and comparing its work unfavorably

with that of the British system, and while statesmen are devising plans of reorganization and reform, the proceedings I append may be of interest to the general public, and particularly to exporters and manufacturers.

The following circular was addressed to the presidents of all the chambers of commerce in Great Britain:

ASSOCIATION OF CHAMBERS OF COMMERCE OF THE UNITED KINGDOM,
1 GREAT COLLEGE STREET, WESTMINSTER, S. W.,

June 19, 1895.

DEAR SIR: The attention of the executive council has been directed to the action taken by the Government of the United States and by other governments, by means of special consular reports, in order to supply their traders with information up to date with regard to openings for business in foreign countries. The council fully recognize the care taken by Her Majesty's consuls in the preparation of their reports, yet they feel that the practical value of these reports would be much increased if they afforded more direct and early suggestions and details with respect to trade questions of present interest. The council wish, therefore, to ask local chambers and their members who are engaged in commerce with foreign countries to state whether there are at the present time any particular trade questions (more especially in furtherance of the extension of our trade) which should be brought before the Foreign Office, in order to obtain advice or statements thereon from Her Majesty's consuls, either in a special report or in their next annual report, and, if so, whether in the opinion of your chamber the matter mentioned by you should, in the first instance at least, be treated by the Foreign Office as a confidential communication for the benefit of our trade before it is made public. I shall be glad to receive your answer to this circular before the 31st of July.

I am, dear sir, yours faithfully,

EDWARD W. FITHIAN,
Secretary.

Most of the chambers have already acted upon this circular, and I take pleasure in inclosing a brief summary of the proceedings of two chambers in this immediate district on the subject. The appended is from the published proceedings of the Bradford chamber:

BRADFORD CHAMBER ON BRITISH CONSULS AND TRADE QUESTIONS.

A circular has been received from the Association of Chambers of Commerce asking whether, in the opinion of the Bradford chamber, there were any particular trade questions (more especially in furtherance of the extension of trade) which should be brought before the Foreign Office in order to obtain advice or statements thereon from Her Majesty's consuls.

Mr. W. H. Mitchell said that American consuls did a great deal more in this direction than our own did. It would be difficult, perhaps, to state any precise matter on which information was now required, but the opinion might be expressed that the British consuls might supply more information on trade questions.

Mr. Whitehead said that the associated chambers were already alive to this need, and were now asking for definite subjects on which information might be sought.

A discussion of the same character took place at the Halifax Chamber of Commerce, which replied that—

The council of that chamber is of opinion that general instructions should be given to consuls to furnish the home government with information as to the special classes of goods used in their districts, together with any suggestions they can offer, and that the Foreign Office should furnish this information to chambers of commerce for the benefit of the trading community, and also that traders should in the same manner be able to address particular trade questions through the same channels.

All this may be another illustration of the fact that a prophet is never without honor save in his own country. It may be interesting to the public to know, too, that the work of consular officers of the United States is, as a general rule, very highly spoken of by British merchants and tourists. Our consuls are given credit for zeal, intelligence, and great activity, and their willingness to oblige traders and travelers with useful information and counsel is often alluded to. The English newspapers constantly publish extracts from CONSULAR REPORTS issued by the Department of State at Washington, and the information embraced in these reports is not infrequently made use of by the exporters, investors, and engineers of the United Kingdom.

CLAUDE MEEKER,
Consul.

BRADFORD, *August 9, 1895.*

AFFAIRS IN KOREA.

The following mining regulations for opening gold mines were issued with the approval of His Majesty:

MINING REGULATIONS.

The gold mines will be opened when the superintendent of the mineral bureau and tutor of mineral works have traveled and examined clearly. Other extra officials shall be dispatched from the Department of Agriculture, Commerce, and Public Works to arrange the mineral works with the foregoing officers. Extra officials shall be dispatched to the mineral mountains, and they shall be lodged in different places to control the business of mining.

The said officials shall have their own seals to put on every official paper.

Obstructions to mining operations on the part of the people shall be removed and the difficulties settled by the department upon the report of a special officer sent to examine.

The said officials, when occasion demands, shall transact business with the local authority.

After the return of the superintendent for the mineral bureau and the tutor of the mineral works to Seoul, any difficulties reported shall be settled with the local authorities by the official especially sent for this purpose.

All the mines shall be examined clearly by the special officer, and the taxes which were fraudulently kept back shall then be collected.

The superintendent for the mineral bureau and the tutor of mineral works shall be sent out again to examine all the mines clearly after the above said special officer has settled his business with the local authorities.

All the taxes of mines shall be delivered up to the department in a clear, correct account at the end of the month by the special officer.

One tax collector shall be placed in every mine to gather the taxes from the leader or representative of the miners. The tax collector will be introduced by the said officer who is dispatched especially, and the collector shall be responsible for taxes not paid. The tax collector will gather the gold from the miners twice a month.

The collected gold, with a clear account, shall be delivered promptly to the special officer who is sent by the tax collector.

The date upon which the collected gold shall be sent to the department in Seoul shall be fixed by the special officer, according as the distance is far or near.

The special officer shall send to the department in Seoul about every three months the gold which is collected from the miners, even if the distance is extremely far.

Weighing scales shall be given to the special officer by the department in Seoul for a sample, so that all the scales for mineral ores shall be alike.

The tax collector shall give receipts to the different miners when he receives the taxes from them, and his seals shall be put on as official evidence.

One-twentieth of the taxes will be given to the special officer for his wages and traveling expenses. The tax collector will receive his wages and expenses in the same manner.

The representative of the miners shall be selected chiefly by the natives, so that he may reside conveniently for business. If a person living in another district wishes to be a representative of miners, he will not be permitted to open a mine unless upon a petition of the natives.

The tickets or permits of miners shall be made and delivered by the department in Seoul to the different mineral places. The tickets will be cut into two parts, one-half to be taken by the officer who is sent especially and the other half given to the different miners.

The date of said ticket will be written plainly, and the tickets will be sent monthly according to the number named in the report of the special officer.

The special officer must report monthly concerning the tickets forwarded with the report in which the taxation is mentioned, to the department in Seoul.

The miners must bear upon their bodies the wooden blocks on which the tickets are pasted.

Cooks and water carriers must also be ticketed the same as others, although they are not miners.

One-tenth of taxation will be taken by the representative of miners, but not if the number of miners who are under one representative is less than ten.

The current tax, about 7 pun of gold (1 pun=1 yen), will be levied from the miners monthly by weight throughout this country.

The foregoing taxes will be collected from the miners twice a month, $3\frac{1}{2}$ pun of gold at each collection.

Five pieces of copper money [1 cent] will be collected from the miners who take tickets.

The miner who has no ticket will be sentenced strictly, and the gold which he has mined shall be confiscated. Not only shall the said criminal be examined seriously, but his master (representative) shall be arrested and punished.

Any miner who causes disorder by intoxication or wicked conduct, must be punished according to the special law which is passed by the mineral officers, or be expelled from the mineral place.

Any local subject who breaks the mineral laws shall be investigated seriously by the local authorities, and they must not be shielded.

The tax collector or leader (representative) who escapes after having kept back the taxes must be detected by every means, and their security shall be compelled to refund the amounts taken.

The mineral veins can not be dug within 50 paces of a field, grave, or house.

OFFICIAL HOURS.

The following extract from the Official Gazette of July 3, 1895, is noteworthy, as, for the first time in the history of Korea, setting aside the seventh day (Sunday) as a day of rest:

The following is decreed as the proper hours for the transaction of official business at Seoul: From 9 a. m. to 3 p. m., from the time of the "grain rains" (about April 20) to the time of the "lesser heat" (about July 7); from 8 a. m. to 12 noon, from the time of the "lesser heat" to the time of "hoar frost" (about September 8); from 10 a. m. to 4 p. m., from the time of the "hoar frost" to the time of the "grain rains."

The following holidays will be observed: The 16th of the 7th moon, the official date of the new era—the declaration of Korean independence; the 25th of the 7th moon, the birthday of His Majesty; the 12th of the 7th moon, the date of the King's oath to support the new Government; five days before and five days after the New Year shall be kept as holidays.

Subordinates may be excused from duty by their superiors from the date of the "lesser heat" to "hoar frost" in case their absence will not work injury to the public business.

Sunday shall be kept by every officer as a day of rest. Offices shall close at 12 noon Saturday.

KOREAN ARMY.

According to the Official Gazette of June 22, the following constitutes the Korean army and the pay thereof:

Number of regiments, officers, and troops.

Description.	Infantry.	Trains.	Cavalry.
Regiments.....	8	2	2
Lieutenant-colonels.....	8	.....	2
Majors.....	16	.....	4
Captains.....	32	.....	8
First lieutenants.....	32	.....	8
Second lieutenants.....	16	.....	4
Third lieutenants.....	128	.....	32
Cadets.....	112	.....	28
Soldiers.....	3,200	800	800

Pay per month.

Description.	Infantry.	Trains.	Cavalry.
Lieutenant-colonel.....	\$20.00	.....	\$23.00
Major.....	15.00	.....	18.00
Captain.....	12.00	.....	15.00
First lieutenant.....	10.00	.....	13.00
Second lieutenant.....	7.00	.....	10.00
Third lieutenant.....	6.00	.....	9.00
Cadet.....	5.00	.....	8.00
Soldier.....	3.50	\$3.50	6.50

The above amounts are in silver yen. At present the silver yen is worth 50 cents in gold.

POSTAL BUREAU.

A Korean postal bureau has been organized under the Department of Public Works and connected with the telegraph bureau for the purpose of transporting mail within the limits of Korea. The stamps used, of which I inclose samples, were made in Washington, and are of the following denominations: Five poon (1 cent silver), 10 poon (2 cents), 25 poon (5 cents), and 50 poon (10 cents). Mails are received at the office in Seoul for transportation to the country from to-day (July 22, 1895).

JOHN M. B. SILL,
Consul-General.

SEOUL, *July 8 and 22, 1895.*

EXPORTS DECLARED FOR THE UNITED STATES.

QUARTER ENDING JUNE 30, 1895.

ALGERIA.

[Report by Consul Grellet]

Algiers.

Cork wood.....	\$29. 88
Curiosities (Algerian).....	161. 15
Fish (salted).....	194. 15
Goatskins.....	58,578. 52
Rough sticks.....	175. 69
All others.....	8,762. 27
Total*	67,901. 66

Oran.

African fiber.....	11,203. 36
Goatskins.....	2,932. 29
Total	14,135. 65

Total from Algeria.

African fiber.....	11,203. 36
Cork wood.....	29. 88
Curiosities (Algerian).....	161. 15
Fish (salted).....	194. 15
Goatskins.....	61,510. 81
Rough sticks.....	175. 69
All others.....	8,762. 27
Total	82,037. 31
Total for same quarter in 1894..	48,745. 58
Increase	34,291. 73

AUSTRIA-HUNGARY.

[Report by Consul-General Judd.]

Budapest.

Beans and lentils.....	31,359. 52
Books and papers.....	2,051. 12
Coffee.....	174. 34
Furniture.....	1,827. 85
Glassware.....	4,931. 91
Herbs, roots, and leaves.....	1,291. 67
Leather and skins.....	2,462. 90
Mineral water.....	29,175. 62
Oils, paints, and colors.....	381. 64
Porcelain and pottery.....	404. 34
Pulp.....	5,614. 31
Umbrella fixtures and sticks.....	5,350. 81
Wines and liquors.....	18,955. 78
Miscellaneous.....	2,168. 22
Total	106,250. 03
Total for same quarter in 1894..	167,596. 11
Decrease	61,346. 08

Prague.

Art, works of.....	\$2,384. 84
Beans and lentils.....	81,002. 68
Bed feathers.....	40,016. 35
Beer.....	31,527. 96
Beet-root sugar.....	15,583. 31
Books and papers.....	2,152. 12
Buttons.....	7,464. 10
Cloth and woolen goods.....	5,490. 73
Coffee.....	716. 25
Cotton goods.....	589. 47
Drugs and chemicals.....	11,711. 82
Furniture.....	4,254. 71
Glassware.....	42,487. 91
Gloves.....	19,077. 51
Graphite.....	904. 04
Gum and glue.....	4,483. 82
Hair, human.....	9,718. 70
Linen goods.....	6,426. 65
Metal ware.....	2,148. 50
Mineral water.....	1,652. 35
Musical instruments.....	16,551. 55
Paper goods.....	5,410. 73
Porcelain and pottery.....	120,098. 03
Potash.....	12,202. 86
Pulp.....	28,374. 88
Toys.....	3,524. 42
Miscellaneous.....	1,612. 33
Total	477,568. 62
Total for same quarter in 1894..	544,778. 25
Decrease	67,209. 63

Reichenberg.

Art, works of.....	307. 91
Artificial flowers.....	835. 23
Buttons.....	22,321. 27
Cloth and woolen goods.....	3,661. 76
Cotton goods.....	507. 31
Cutlery.....	7,750. 20
Glassware.....	180,496. 13
Jewelry and precious stones.....	64,112. 04
Linen goods.....	88,110. 91
Metal ware.....	3,261. 43
Musical instruments.....	1,318. 14
Oils, paints, and colors.....	168. 28
Porcelain and pottery.....	72,578. 27
Silks and velvets.....	1,236. 85
Smokers' articles.....	147. 77
Sparterie.....	2,443. 20
Toys.....	1,668. 01
Miscellaneous.....	3,801. 21
Total	454,725. 92
Total for same quarter in 1894..	192,010. 05
Increase	262,715. 87

* Where the comparative figures for "the same quarter in 1894" are not given, the omission is due to the fact that such figures were not obtainable.

Trieste.

Coffee.....	\$16,980.84
Cuttle bones.....	480.42
Drugs and chemicals.....	3,454.76
Fruits, dried, etc.....	1,285.22
Gum and glue.....	1,103.39
Herbs, roots, and leaves.....	6,644.75
Insect powder and flowers.....	24,041.94
Leather and skins.....	136,892.30
Oils, paints, and colors	5,965.99
Polishing earth.....	1,938.42
Seeds	1,000.85
Sponges.....	3,588.18
White lead.....	2,370.32
Wines and liquors.....	1,973.28
Miscellaneous.....	1,313.56
Total.....	209,034.22
Total for same quarter in 1894..	157,154.26
Increase	51,879.96

Vienna.

Albumen	2,593.27
Amber.....	510.12
Antiquities	1,427.96
Art, works of.....	2,378.96
Artificial flowers.....	1,098.30
Baskets and basket ware.....	6,583.70
Beans and lentils.....	5,503.22
Beer	1,432.55
Books and papers.....	2,460.74
Brushes and bristles.....	2,844.11
Buttons	66,848.07
Carbons.....	9,044.84
Carriages.....	895.23
Cloth and woolen goods.....	42,916.24
Cloth (horsehair).....	14,642.82
Cotton goods.....	17,430.78
Cutlery.....	822.73
Dresses	1,360.53
Drugs and chemicals.....	42,408.36
Fans.....	21,236.72
Furniture.....	17,126.98
Glassware.....	47,380.66
Gloves	26,586.49
Hair, animal.....	2,651.10
Hats and caps.....	6,910.21
Leather and skins.....	3,616.18
Leather goods.. ..	7,544.06
Linen goods.....	49,206.19
Machines and parts of.....	1,538.93
Magnesite.....	6,543.55
Meerschaum, crude.....	5,315.75
Metal ware.....	27,657.65
Musical instruments.....	735.01
Ozocerite and ceresin.....	2,472.53
Paper goods.....	2,229.83
Porcelain and pottery.....	6,487.59
Scientific instruments.....	2,158.27
Shell and bone ware.....	4,030.26
Silks and velvets.....	72,866.07
Smokers' articles.....	17,653.42
Stained glass.....	5,018.97
Stationery	852.92
Tobacco.....	531.83

Toys.....	\$1,901.91
Umbrella fixtures and sticks.....	24,973.03
Wines and liquors.....	4,361.46
Wooden ware	4,183.19
Miscellaneous.....	1,575.72
Total.....	598,749.01
Total for same quarter in 1894..	426,818.35
Increase	171,930.66

Total from Austria-Hungary.

Albumen	2,593.27
Amber.....	510.12
Antiquities.....	1,427.96
Art, works of.....	5,071.71
Artificial flowers.....	1,933.53
Baskets and basket ware.....	6,583.70
Beans and lentils.....	117,865.42
Bed feathers.....	40,016.35
Beer	32,960.51
Beet-root sugar.....	15,583.31
Books and papers.....	6,663.98
Brushes and bristles.....	2,844.11
Buttons	96,633.44
Carbons.....	9,044.84
Carriages	895.23
Cloth and woolen goods.....	52,068.73
Cloth (horsehair).....	14,642.82
Coffee.....	17,871.43
Cotton goods.....	18,527.56
Cutlery.....	8,572.93
Cuttle bones.....	480.42
Dresses	1,360.53
Drugs and chemicals.....	57,574.94
Fans.....	21,236.72
Fruits, dried, etc.....	1,285.22
Furniture	23,209.54
Glassware.....	275,296.61
Gloves	45,664.00
Graphite	904.04
Gum and glue.....	5,587.71
Hair:	
Animal.....	2,651.10
Human.....	9,718.70
Hats and caps.....	6,910.21
Herbs, roots, and leaves.....	7,936.42
Insect powder and flowers.....	24,041.94
Jewelry and precious stones.....	64,112.04
Leather and skins.....	142,971.38
Leather goods.....	7,544.06
Linen goods.....	143,743.75
Machines and parts of.....	1,538.93
Magnesite.....	6,543.55
Meerschaum, crude.....	5,515.75
Metal ware.....	33,067.58
Mineral water.....	30,827.97
Musical instruments.....	18,604.70
Oils, paints, and colors.....	6,515.91
Ozocerite and ceresin.....	2,472.53
Paper goods.....	7,640.56
Polishing earth.....	1,938.42
Porcelain and pottery.....	199,568.23
Potash	12,202.86
Pulp.....	33,989.19
Scientific instruments.....	2,158.27

Seeds	\$1,000.85
Shell and bone ware.....	4,030.26
Silks and velvets.....	74,102.92
Smokers' articles.....	17,801.19
Sparterie.....	2,443.20
Sponges.....	3,588.18
Stained glass.....	5,018.97
Stationery	852.92
Tobacco.....	531.83
Toys.....	7,094.34
Umbrella fixtures and sticks.....	30,323.84
White lead.....	2,370.32
Wines and liquors.....	25,290.52
Wooden ware.....	4,183.19
Miscellaneous.....	10,571.04
Total.....	1,846,327.80
Total for same quarter in 1894..	1,488,357.02
Increase.....	357,970.78

BELGIUM.

[Report by Consul Roosevelt.]

Antwerp.

Bleaching powders.....	7,277.48
Cement.....	131,618.02
Chicory	20,776.34
Coffee.....	5,876.28
Diamonds.....	400,525.17
Feathers (bed).....	2,958.11
Furniture.....	2,732.72
Gin	424.69
Glass (plate).....	12,479.23
Glycerin.....	6,235.69
Hair, animal.....	20,602.04
India rubber.....	4,892.06
Ivory	22,714.35
Lead.....	92,470.34
Meat extract.....	26,647.03
Oil.....	548.74
Oil paintings.....	2,448.01
Ore	11,580.00
Paper and books.....	18,754.53
Phosphates.....	3,860.26
Potash.....	12,825.84
Rags and paper stock.....	5,078.42
Sardines.....	11,330.73
Skins (rabbit, sheep, and other).....	358,984.11
Soda.....	6,889.81
Vegetable fibers (flax, hemp, and tow). ..	18,730.46
Wine.....	725.46
Wool.....	124,372.94
Grease.....	4,851.59
Sundries	13,529.29
Total.....	1,352,739.74
Total for same quarter in 1894..	344,956.97
Increase.....	1,007,782.77

Brussels.

Albumen	561.63
Aniline colors	2,912.98
Bagging.....	102.56
Braids and button stock.....	6,557.22

Braids (hat beads) and jet on wire.....	\$2,461.68
Brass.....	149.18
Bronze ornaments.....	195.12
Cement.....	163,190.36
Coke.....	2,132.05
Combs	210.42
Corsets.....	51,816.37
Earthenware.....	973.38
Enamel	3,410.33
Fire bricks	827.43
Fur, refuse of.....	1,839.29
Glass :	
Plate.....	157,124.08
Window.....	122,852.28
Other	3,402.81
Gloves.....	49,444.55
Glue and glue stock.....	1,642.39
Hair (animal).....	1,335.66
Hats	1,117.39
Hatters' fur.....	32,113.53
Horn strips.....	655.46
Lace goods.....	16,530.20
Leather	3,305.18
Linen goods.....	84,830.71
Machinery.....	1,833.50
Marble	7,055.80
Marble and granite.....	285.11
Medicinal plants.....	149.67
Musical instruments.....	380.40
Naphthalene.....	2,187.60
Paper and books.....	3,298.21
Phosphates.....	10,392.09
Plants.....	99.10
Rags and paper stock.....	7,353.54
Rattans	96.50
Skins (rabbit, sheep, and other).....	67,710.61
Soda, prussiate of.....	6,006.60
Stones :	
Ground flint.....	533.36
Paving.....	2,265.62
Tar.....	191.56
Thread (linen).....	2,811.06
Vegetable fibers (flax, hemp, and tow). ..	7,472.78
Wine.....	488.53
Wool.....	1,022.90
Woolen goods.....	3,123.05
Sundries.....	44,486.23
Total.....	880,938.06
Total for same quarter in 1894..	721,418.30
Increase.....	159,519.76

Ghent.

Braids and button stock.....	557.84
Braids (hat beads) and jet on wire.....	895.99
Cement.....	16,001.52
Chicory	1,078.57
Root.....	32,767.01
Cordage.....	553.83
Glass.....	921.49
Hair (human).....	439.08
Hatters' fur.....	8,521.44
Lace goods.....	10,502.90
Linen goods.....	31,288.79
Marble.....	505.04
Matches.....	311.18

Oil.....	\$1,814.17
Plants.....	36,429.91
Rags and paper stock.....	94,224.07
Silk shoe laces.....	1,450.82
Skins (rabbit, sheep, and other).....	59,370.36
Thread (linen).....	492.73
Vegetable fibers (flax, hemp, and tow).....	65,841.23
Wine.....	430.29
Yarns (crochet) cotton.....	205.97
Sundries	392.93
Total.....	364,997.16
Total for same quarter in 1894..	227,789.27
Increase.....	137,207.89

Liege.

Arsenic.....	3,491.95
Fancy goods.....	148.64
Firearms.....	171,816.82
Glassware	30,985.13
Hones.....	793.64
Indigo.....	595.09
Machinery.....	2,316.76
Oil.....	210,148.03
Paper and books.....	1,533.75
Rags and paper stock.....	340.09
Skins (rabbit, sheep, and other).....	47,755.98
Straw goods.....	5,082.80
Superphosphate.....	7,216.69
Wool.....	182,121.16
Woolen goods.....	155,248.50
Yarns (crochet) woolen.....	8,083.43
Zinc and zinc paint.....	5,783.48
Sundries.....	236.70
Total.....	623,550.61
Total for same quarter in 1894..	178,612.13
Increase.....	444,938.48

Total from Belgium.

Albumen	561.63
Aniline colors.....	2,912.98
Arsenic.....	3,491.95
Bagging.....	102.56
Bleaching powders.....	7,277.48
Braids and button stock.....	7,115.06
Braids (hat beads) and jet on wire.....	3,357.67
Brass	149.18
Bronze ornaments.....	195.12
Cement.....	310,809.90
Chicory	21,854.91
Root.....	32,767.01
Coffee.....	5,876.28
Coke.....	2,132.05
Combs	210.42
Cordage.....	553.83
Corsets.....	51,816.37
Diamonds.....	400,525.17
Earthenware.....	973.38
Enamel	3,410.33
Fancy goods.....	148.64
Feathers (bed).....	2,958.11
Firearms.....	171,816.82
Fire bricks.....	827.43
Fur, refuse of.....	6,839.29
Furniture.....	2,732.72

Gin	\$424.69
Glass :	
Plate.....	169,603.31
Window.....	122,852.28
Other	4,324.30
Ware.....	30,985.13
Glycerin.....	6,235.69
Gloves.....	49,444.55
Glue and glue stock.....	1,642.39
Hair :	
Animal.....	21,937.70
Human.....	439.08
Hats.....	1,117.39
Hatters' fur.....	40,634.97
Hones.....	793.64
Horn strips.....	655.46
India rubber.....	4,892.06
Indigo.....	595.09
Ivory.....	22,714.35
Lace goods.....	27,033.10
Lead.....	92,470.34
Leather	3,305.18
Linen goods.....	116,119.50
Machinery.....	4,150.26
Marble.....	7,560.84
Marble and granite.....	285.11
Matches.....	311.18
Meat extract.....	26,647.03
Medicinal plants.....	149.67
Musical instruments.....	380.40
Naphthalene.....	2,187.60
Oil	2,362.91
Oil paintings.....	2,448.01
Ore	11,580.00
Paper and books.....	23,586.49
Phosphates.....	14,252.35
Plants.....	36,529.01
Potash	12,825.84
Rags and paper stock.....	106,996.12
Rattans	96.50
Sardines.....	11,330.73
Silk shoe laces.....	1,450.82
Skins (rabbit, sheep, and other).....	533,821.06
Soda	6,889.81
Prussiate of.....	6,006.60
Stones :	
Ground flint.....	533.36
Paving.....	2,265.62
Straw goods.....	5,082.80
Superphosphate.....	7,216.69
Tar.....	191.56
Thread (linen).....	3,303.79
Vegetable fibers (flax, hemp, and tow).....	92,044.47
Wine.....	1,644.28
Wool.....	307,517.00
Grease.....	4,851.59
Woolen goods.....	158,371.55
Yarns :	
Crochet cotton.....	205.97
Woolen.....	8,083.43
Zinc and zinc paint.....	5,783.48
Sundries.....	58,645.15
Total.....	3,222,225.57
Total for same quarter in 1894..	1,472,776.67
Increase.....	1,749,448.90

BRAZIL.

Para.

[Report by Consul Mathews.]

Animals and snakes.....	\$81.50
Balsam of copaiba.....	2,130.25
Cacao.....	22,755.55
Feathers.....	2,360.75
Guarana.....	4,365.90
Nuts (Brazil).....	42,924.10
Orchids.....	330.00
Roots (manaca).....	194.00
Rubber.....	1,767,921.70
Skins (deer).....	11,160.75
American goods returned.....	40.00
Total.....	1,854,264.50
Total for quarter ending March	
31, 1895.....	3,930,236.80
Total for quarter ending Decem-	
ber 31, 1894.....	3,694,904.52
Total for quarter ending Sep-	
tember 30, 1894.....	1,604,269.30

Rio Grande do Sul.

[Report by Vice-Consul Jones.]

Glue stock.....	3,820.57
Hair.....	1,291.12
Hides:	
Dry.....	85,922.59
Salted.....	105,085.63
Horns.....	602.38
Horn piths.....	417.31
Sounds.....	73.48
Wool.....	3,952.79
Total.....	201,165.87

BRITISH AFRICA.

Durban, Natal.

[Report by Consular Agent Prince.]

Wool, in the grease (82 bales).....	3,357.46
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Mauritius.

Report by Consul Campbell.]

Sugar.....	165,611.29
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Port Elizabeth (Cape Colony.)

[Report by Consular Agent Chabaud.]

Skins (756 bundles).....	24,597.66
Sundries.....	60.85
Wool (2,255 bales).....	120,145.00
Total.....	144,803.51

BRITISH INDIA.

Bombay.

[Report by Vice-Consul Comfort.]

Goat leather (2 bales).....	\$621.80
Stuff (1 case).....	220.24
Fans (2 cases).....	178.75
Indian carpets (2 cases).....	280.55
Mother-of-pearl shells (72 cases).....	2,309.12
Woodwork (3 cases).....	196.12
Woolen carpet (1 bale).....	344.85
Indian carpets (2 cases).....	205.70
Clay figures, curios (3 cases).....	207.96
Curios (2 cases).....	3,160.25
Woolen carpets (2 bales).....	241.53
Indian merchandise (1 case).....	288.23
Indian condiments (7 cases).....	38.23
Merchandise (8 cases).....	959.32
Mother-of-pearl shells (91 cases).....	2,905.17
Indian condiments (21 cases).....	232.86
Musical instrument and book (1 case)	98.87
Carpet (1 case).....	121.83
Shawl, gold, silver (3 cases).....	246.17
Indian condiments (39 packages).....	289.79
Merchandise (913 bags).....	2,446.73
Persian carpets (2 bales).....	222.12
Indian curios (1 case).....	80.61
Books and Indian curios (2 boxes).....	88.23
Cotton silk stuff (6 packages).....	852.48
Indian curios (38 packages).....	2,285.51
Indian curios (2 cases).....	172.06
Indian carpets (3 cases).....	366.37
Ghagras, phulcaries, etc. (7 cases)....	607.19
Brass ware (7 cases).....	836.49
Woolen carpets and Indian curios	
(5 packages).....	545.63
Indian curios (5 packages).....	431.86
Indian carpets (2 cases).....	392.13
Woodwork (5 cases).....	392.26
Methy seed (369 bags).....	672.00
Total.....	23,539.13

Calcutta.

[Report by Consul-General Polk.]

Drugs.....	560,668.00
Fishing rods.....	883.00
Gunny:	
Bags.....	425,524.00
Cloth.....	649,314.00
Hides.....	351,894.00
Jute.....	57,314.00
Butts and rejections.....	228,057.00
Linseed.....	369,687.00
Mica.....	36,318.00
Oil.....	1,443.00
Paper stock.....	2,165.00
Rubber.....	35,900.00
Saltpeter.....	85,337.00
Silk (raw).....	7,325.00
Skins.....	1,884,934.00
Tea.....	84.00
Miscellaneous.....	10,369.00
Total.....	4,707,216.00

CANADA.

MANITOBA.

[Report by Consul Duffie.]

Deloraine.

Emigrants' effects.....	\$200. 00
Horned cattle.....	1,276. 60
Total.....	1,476. 60

Emerson.

Horses.....	200. 00
Potatoes.....	177. 80
Seneca root.....	339. 00
Settlers' effects.....	1,093. 00
Total.....	1,809. 80

Gretna.

Emigrants' effects.....	1,345. 00
Horses and cattle.....	656. 00
Total.....	2,001. 00

Fort William.

Fresh fish.....	1,843. 05
Pulp wood.....	2,000. 00
Total.....	3,843. 05

Rat Portage.

Fresh fish.....	18,869. 95
Fish eggs.....	7,225. 79
Lumber.....	1,401. 60
Groceries and provisions.....	291. 22
Dry goods.....	129. 62
Hardware.....	58. 72
Fishing boats.....	100. 00
Total.....	28,076. 90

Lethbridge.

Bolts, track (307 pounds).....	4. 60
Coal (2,331 tons).....	4,662. 27
Effects, personal.....	3,440. 00
93 dry beef hides, 108 sheep pelts, and 7 calfskins.....	161. 20
Locomotive.....	1,000. 00
Plates, fish (996 pounds).....	14. 94
Rails, steel (17.9 tons).....	342. 38
Total.....	9,625. 39

Winnipeg.

Fresh fish.....	1,021. 00
Personal effects.....	9,377. 10
Raw furs.....	56,480. 36
Raw hides.....	15,064. 83
Seneca root.....	8,278. 10
Potatoes.....	6,943. 23
Empty barrels.....	1,511. 75
Paper hangings.....	180. 50
Tea.....	191. 50
Machinery.....	323. 47
Total.....	99,371. 84

Total from Manitoba.

Fresh fish.....	\$21,734. 00
Fish eggs.....	7,225. 79
Personal effects.....	15,555. 10
Raw furs.....	56,480. 36
Raw hides.....	15,226. 03
Seneca root.....	8,617. 10
Potatoes.....	7,121. 03
Empty barrels.....	1,511. 75
Machinery.....	1,323. 47
Coal.....	4,662. 27
Pulp wood.....	2,000. 00
Lumber.....	1,401. 60
Sundries.....	3,445. 58
Total.....	146,304. 08

MARITIME PROVINCES AND NEWFOUND-
LAND.

[Report by Consul-General Ingraham.]

Charlottetown, P. E. I.

Agricultural products :	
Potatoes.....	11,392. 27
Turnips.....	15. 00
Animals (horses).....	7,405. 50
Eggs.....	3,311. 58
Emigrants' effects.....	2,945. 00
Fish :	
Canned.....	92,178. 00
Dry.....	57. 00
Pickled.....	338. 50
Furs, hides, and skins.....	1,773. 03
Sundries.....	23. 00
Wool.....	2,024. 35
Total.....	221,463. 23
Total for same quarter in 1894..	108,808. 77
Increase.....	112,654. 46

Halifax, N. S.

Agricultural products (potatoes).....	5,322. 07
Emigrants' effects.....	1,315. 00
Fish :	
Canned.....	69,197. 21
Dry.....	62,837. 84
Fresh.....	9,461. 33
Pickled.....	6,143. 00
Fertilizer.....	6,137. 06
Furs, hides, and skins.....	3,889. 08
Glue stock.....	125. 00
Goods returned to United States.....	5,590. 30
Household effects.....	1,196. 50
Junk.....	3,609. 23
Liquors.....	419. 69
Sundries.....	162. 40
Wood :	
Laths and lumber.....	43,034. 73
Pulp.....	2,230. 78
Zinc plates.....	133. 96
Total.....	221,405. 18
Total for same quarter in 1894..	150,305. 10
Increase.....	71,110. 08

Moncton, N. B.

Agricultural products:

Fruit.....	\$668. 75
Potatoes.....	4,092. 10
Animals (horses).....	165. 00
Bark and bark extract.....	814. 69
Clay.....	2,497. 07
Eggs.....	12. 00
Emigrants' effects.....	1,930. 00
Fish:	
Canned.....	22,203. 30
Fresh	868. 32
Furs, hides, and skins.....	3,446. 15
Goods returned to United States.....	97. 50
Minerals:	
Gypsum.....	16,276. 30
Plaster—	
Calcined.....	3,713. 60
Wall.....	435. 00
Sundries.....	10. 50
Wood:	
Laths and lumber.....	119,163. 85
Fire.....	680. 00
Pulp.....	1,400. 00
Sulphite fiber.....	11,265. 83
Total.....	189,739. 96
Total for same quarter in 1894..	152,519. 08
Increase.....	37,219. 88

Pictou, N. S.

Agricultural products (potatoes).....	191. 50
Coal	12,189. 90
Emigrants' effects.....	145. 00
Fish:	
Canned.....	41,997. 00
Fresh	10,618. 13
Pickled.....	7,797. 00
Furs, hides, and skins.....	383. 31
Hair (plaster).....	823. 49
Minerals (gypsum).....	3,010. 03
Stone for building.....	2,233. 25
Sundries	323. 50
Wood:	
Laths and lumber.....	1,363. 10
Fire.....	12. 50
Ships' knees.....	675. 00
Wool.....	2,287. 75
Total.....	84,050. 46
Total for same quarter in 1894..	119,886. 95
Decrease.....	35,736. 49

St. John, N. B.

Agricultural products (potatoes).....	9,521. 05
Animals (horses).....	539. 00
Bark and bark extract.....	5,625. 00
Coal.....	302. 50
Cotton duck and cotton waste.....	1,302. 54
Emigrants' effects.....	8,604. 20
Fish:	
Canned.....	1,793. 50
Dry.....	2,074. 09
Fresh	880. 00
Smoked	7,066. 15

Furs, hides, and skins.....	\$2,550. 67
Glue stock.....	374. 41
Goods returned to United States.....	371. 95
Gum (spruce).....	407. 95
Minerals:	
Cement.....	1,165. 00
Granite.....	32. 00
Lime.....	11,427. 82
Paris green.....	9,954. 75
Paper stock.....	322. 50
Salt.....	1,465. 00
Sundries.....	633. 25
Tar	200. 00
Tin plates.....	146. 00
Wood:	
Laths and lumber.....	689,594. 73
Fire.....	7,140. 50
Ships' knees.....	509. 15
Wool.....	3,350. 10
Total.....	767,353. 72
Total for same quarter in 1894..	463,130. 21
Increase.....	304,223. 51

St. John's, N. F.

Fish:	
Dry.....	17,915. 47
Oil.....	13,223. 45
Furs, hides, and skins.....	2,678. 98
Sulphuret of iron.....	81,893. 60
Sundries.....	1,218. 36
Total.....	116,929. 86
Total for same quarter in 1894..	27,442. 80
Increase.....	89,487. 06

St. Stephen N. B.

Agricultural products:	
Potatoes.....	1,615. 00
Turnips	606. 00
Animals (horses).....	245. 00
Bark and bark extract.....	865. 00
Coal.....	162. 00
Emigrants' effects.....	2,472. 00
Fish:	
Dry.....	41. 00
Pickled.....	7. 00
Furs, hides, and skins.....	720. 00
Goods returned to United States.....	4,420. 00
Grindstones.....	60. 00
Minerals (paris green).....	1,000. 00
Molasses.....	2,436. 00
Sundries.....	679. 00
Wood (laths and lumber).....	75,372. 00
Total.....	90,700. 00
Total for same quarter in 1894..	32,821. 36
Increase.....	57,979. 64

Windsor, N. S.

Agricultural products:	
Fruit.....	351. 00
Potatoes	11,130. 00
Coal.....	4,226. 00

Emigrants' effects.....	\$625.00
Fish, fresh	175.00
Furs, hides, and skins.....	225.00
Goods returned to United States.....	234.00
Grindstones.....	1,190.00
Manganese.....	2,838.00
Minerals:	
Gypsum.....	32,447.00
Plaster (calcined).....	802.00
Sundries.....	80.00
Wood:	
Laths and lumber.....	85,264.00
Fire.....	1,164.00
Ships' knees.....	898.00
Wool.....	205.00
Total.....	141,884.00
Total for same quarter in 1894..	120,872.38
Increase.....	21,011.62

Woodstock, N. B.

Agricultural products:	
Hay..	5,603.60
Potatoes.....	5,427.40
Animals (horses).....	872.00
Bark and bark extract.....	9,000.00
Emigrants' effects.....	756.60
Furs, hides, and skins.....	450.00
Sundries.....	437.40
Wood (laths and lumber).....	26,418.75
Total.....	48,965.75
Total for same quarter in 1894..	38,965.38
Increase.....	10,000.37

Yarmouth, N. S.

Agricultural products:	
Potatoes.....	50.00
Turnips	8.00
Animals (horses).....	522.50
Cotton duck and cotton waste.....	1,301.02
Eggs.....	102.00
Emigrants' effects.....	825.00
Fish:	
Canned.....	8,323.50
Dry	2,255.25
Fresh	74,251.50
Oil.....	2,804.00
Furs, hides, and skins.....	2,232.13
Goods returned to United States.....	10,040.92
Sundries.....	96.00
Wood:	
Laths and lumber.....	83,947.47
Fire.....	9,467.50
Pulp.....	848.00
Total.....	197,072.79
Total for same quarter in 1894..	143,788.10
Increase.....	53,284.69

Total from maritime provinces and Newfoundland.

Agricultural products:	
Fruit.....	1,019.75
Hay.....	5,603.60

Agricultural products—Continued.

Potatoes.....	\$48,741.39
Turnips	629.00
Animals (horses).....	9,747.00
Bark and bark extract.....	16,904.69
Clay	2,497.07
Coal.....	16,880.40
Cotton duck and cotton waste.....	2,603.56
Eggs.....	3,425.58
Emigrants' effects.....	19,617.80
Fish:	
Canned.....	235,692.51
Dry.....	85,180.56
Fresh	96,254.28
Oil.....	16,027.45
Pickled.....	14,285.50
Smoked	7,066.15
Fertilizer.....	6,137.06
Furs, hides, and skins.....	18,378.35
Glue stock.....	499.41
Goods returned to United States.....	20,754.67
Grindstones	1,250.00
Gum (spruce).....	407.95
Hair (plaster).....	823.49
Household effects.....	1,196.50
Junk.....	3,609.23
Liquors.....	419.69
Manganese	2,838.00
Minerals:	
Cement.....	1,165.00
Granite.....	32.00
Gypsum.....	51,733.33
Lime.....	11,427.82
Paris green.....	10,954.75
Plaster—	
Calcined.....	4,515.60
Wall	435.00
Molasses.....	2,436.00
Paper stock.....	322.50
Salt.....	1,465.00
Stone for building.....	2,233.25
Sulphuret of iron.....	81,893.60
Sundries.....	3,663.41
Tar.....	200.00
Tin plates.....	146.00
Wood:	
Laths and lumber.....	1,124,158.63
Fire.....	18,464.50
Ships' knees.....	2,082.15
Pulp.....	5,078.78
Sulphate fiber.....	11,265.83
Wool.....	7,867.20
Zinc plates.....	133.96
Total.....	1,980,164.95
Total for same quarter in 1894..	1,358,539.65
Increase.....	621,625.30

FRENCH NORTH AMERICA.

[Report by Commercial Agent Steer.]

St. Pierre, Miquelon.

13,948 pounds old junk.....	141.98
312 drums (710 quintals) of dry codfish.....	2,127.71
Total.....	2,269.69

CEYLON.

[Report by Consul Morey.]

Colombo.

Cinnamon	\$5,240.00
Citronella oil.....	3,553.00
Cocoa.....	2,875.00
Cocoanuts:	
Desiccated	15,092.00
Oil.....	107,583.00
Coffee.....	10,856.00
Plumbago	63,037.00
Tea.....	20,177.00
Palmyra fiber.....	211.00
Total.....	228,624.00
Total for same quarter in 1894..	210,895.00
Increase.....	17,729.00

Galle.

Citronella oil.....	16,464.00
Cocoanut (oil).....	43,664.00
Coir (yarn).....	951.00
Plumbago.....	1,991.00
Total.....	63,070.00
Total for same quarter in 1894..	37,056.00
Increase.....	26,014.00

Total from Ceylon.

Cinnamon	5,240.00
Citronella oil.....	20,017.00
Cocoa.....	2,875.00
Cocoanuts:	
Desiccated	15,092.00
Oil	151,247.00
Coffee.....	10,856.00
Coir (yarn).....	951.00
Plumbago	65,028.00
Tea	20,177.00
Palmyra fiber.....	211.00
Total.....	291,694.00
Total for same quarter in 1894..	247,951.00
Increase.....	43,743.00

CUBA.

[Report by Consul-General Williams.]

Baracoa.

Bananas.....	260,421.75
Cocoanuts.....	6,799.32
Cocoanut oil.....	4,123.00
Total.....	271,344.07

Cardenas.

Beeswax	3,209.56
Logwood.....	91.72
Sugar	2,926,361.17
Total.....	2,929,662.45

Cienfuegos.

Hides.....	\$2,315.62
Honey.....	1,599.93
Lancewood spars.....	1,848.96
Mahogany wood.....	5,020.40
Sugar	3,369,816.76
Total.....	3,380,601.67

Trinidad de Cuba.

Sugar	93,884.47
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Zaza.

Beeswax.....	2,762.26
Bones	440.77
Cedar wood.....	38,851.25
Hides.....	399.61
Honey.....	1,989.65
Sugar.....	127,978.16
Total.....	172,421.70

Habana.

Asphaltum	3,421.57
Beeswax	594.70
Birds.....	1,196.39
Bones	5,782.87
Cigars and cigarettes.....	529,251.59
Fruit.....	161,088.81
Hides	23,714.86
Hair (raw).....	746.35
Hide clippings.....	3,693.04
Hoofs	247.28
Horns.....	375.40
Metals (old copper, brass, iron, etc.)..	14,410.41
Molasses.....	375,579.11
Palm leaf.....	6,274.57
Sugar.....	1,483,748.32
Sponges.....	16,755.97
Sundries.....	9,578.54
Tobacco (leaf).....	1,853,485.30
Total.....	4,489,945.08

Matanzas

Beeswax.....	346.20
Honey.....	753.58
Molasses	23,145.44
Sugar.....	3,435,197.81
Total.....	3,459,443.03

Nuevitas.

Beeswax.....	1,756.36
Cigars and cigarettes.....	32.80
Cedar wood.....	7,507.27
Hides.....	16,077.54
Honey.....	7,971.36
Molasses.....	23,335.25
Sugar	381,355.36
Sponges	170.80
Total.....	438,206.74

Gibara.

Beeswax.....	\$3,599.40
Bananas.....	213,088.46
Cedar wood.....	3,436.91
Hides.....	5,107.64
Honey.....	3,293.18
Lancewood spars.....	981.87
Lignum-vitæ.....	783.79
Mahogany wood.....	9,013.00
Sugar.....	273,717.53
Tortoise shells.....	138.00
Tobacco (leaf).....	2,246.79
Total.....	515,406.57

Sagua la Grande.

Molasses.....	4,753.80
Sugar.....	2,220,020.84
Total.....	2,224,774.64

San Juan de los Remedios.

Sugar.....	1,048,680.37
Tobacco (leaf).....	5,144.72
Total.....	1,053,825.09

Santiago de Cuba.

Beeswax.....	1,561.16
Cigars and cigarettes.....	160.34
Cedar wood.....	1,113.61
Cocoa.....	703.53
Hides.....	589.66
Honey.....	175.01
Iron ore.....	110,447.00
Lignum-vitæ.....	3,237.73
Manganese ore.....	8,137.28
Mahogany wood.....	4,124.22
Palm leaf.....	760.62
Sugar.....	438,825.36
Tobacco (leaf).....	107.35
Total.....	569,942.87

Guanlanamo.

Beeswax.....	750.65
Honey.....	850.75
Sugar.....	1,074,351.77
Total.....	1,075,953.17

Manzanillo.

Cedar wood.....	12,185.84
Lancewood spars.....	851.50
Metals (old copper, brass, iron, etc.)..	38.95
Mahogany wood.....	680.95
Sugar.....	613,480.29
Total.....	627,237.53

Santa Cruz.

Cedar wood.....	46,074.99
Honey.....	974.50

Logwood.....	\$68,656.00
Mahogany wood.....	16,549.88
Total.....	132,255.37

Total from Cuba.

Asphaltum.....	3,421.57
Beeswax.....	14,580.29
Birds.....	1,196.39
Bones.....	6,223.64
Bananas.....	473,510.21
Cigars and cigarettes.....	529,444.73
Cedar wood.....	109,169.87
Cocoa.....	703.53
Cocoanuts ..	6,799.32
Cocoanut oil.....	4,123.00
Fruit.....	161,088.81
Hides.....	48,204.93
Hair (raw).....	746.35
Hide clippings.....	3,693.04
Hoofs.....	247.28
Horns.....	375.40
Honey.....	17,607.96
Iron ore.....	110,447.00
Lancewood spars.....	3,682.33
Lignum-vitæ.....	4,021.52
Logwood.....	68,747.72
Manganese ore.....	8,137.28
Metals (old copper, brass, iron, etc.)..	14,449.36
Molasses.....	426,813.60
Mahogany wood.....	35,388.51
Palm leaf.....	7,035.19
Sugar.....	17,487,408.21
Sponges.....	16,926.77
Sundries.....	9,578.54
Tortoise shells.....	138.00
Tobacco (leaf).....	1,962,960.10

Total..... 21,536,870.45

Total for same quarter in 1894.. 28,299,075.80

Decrease..... 6,762,205.35

DENMARK.

[Report by Consul Kirk.]

Copenhagen.

Annotto.....	160.54
Bagging.....	918.00
Books.....	392.71
Cement.....	36,776.26
Cherry cordial.....	246.02
Chicory.....	455.87
Cotton tares.....	1,366.58
Eiderdown quilts.....	156.58
Flint stones.....	1,156.87
Gloves.....	86.56
Glue.....	1,834.23
Hair (human).....	562.80
Hides.....	49,397.45
Machinery.....	509.20
Porcelain.....	3,465.19
Raisins.....	1,301.50
Rape seed oil.....	3,206.03
Rennets.....	27,004.75

Rope (old manilla).....	\$389. 00
Rubber shoes, old.....	1, 233. 76
Skins.....	2, 670. 62
Syrup of fruit.....	386. 19
Wool.....	1, 582. 11
Miscellaneous.....	234. 81
Total.....	135, 493. 68
Total for same quarter in 1894..	45, 937. 17
Increase.....	89, 556. 51

DUTCH WEST INDIES.

[Report by Consul Spencer.]

Curaçao.

Aloes.....	2, 953. 43
Divi-divi.....	831. 52
Hides and skins.....	11, 167. 95
Straw hats.....	691. 22
Sundries.....	701. 00
Wood.....	2, 390. 26
Wool.....	753. 21
Charges.....	459. 68
Total.....	19, 948. 27
Total for same quarter in 1894..	13, 560. 60
Increase.....	6, 387. 67

Buen Ayre.

Salt.....	1, 352. 65
Increase.....	1, 352. 65

Total from Dutch West Indies.

Aloes.....	2, 953. 43
Divi-divi.....	831. 52
Hides and skins.....	11, 167. 95
Salt.....	1, 352. 65
Straw hats.....	691. 22
Sundries.....	701. 00
Wood.....	2, 390. 26
Wool.....	753. 21
Charges.....	459. 68
Total.....	21, 300. 92
Total for same quarter in 1894..	13, 560. 60
Increase.....	7, 740. 32

GERMANY.

FRANKFORT AND CONSULATES THERE-
UNDER.

[Report by Consul-General Mason.]

Aix la Chapelle.

Books, stationery, photographs, and paper ware.....	57, 651. 00
Buttons and button stuffs, etc.....	4, 560. 20
Dyes, drugs, chemicals, etc.....	33, 613. 58
Glass (plate, window, and mirror).....	3, 491. 50
Linen, woolen, and cotton goods.....	238, 866. 56

Mineral water.....	\$5, 908. 36
Prunes, dried fruits, nuts, land prod- uce, etc.....	17, 479. 66
Pins and needles, and hooks and eyes..	46, 407. 16
Sundries.....	11, 993. 15
Total.....	419, 971. 17
Total for same quarter in 1894..	177, 571. 29
Increase.....	242, 399. 88

Bamberg.

Baskets and basket ware.....	45, 158. 73
Carbons, electric.....	413. 78
China, glass, porcelain, stone, and earthen ware.....	40, 897. 60
Dyes, drugs, chemicals, etc.....	509. 42
Hops.....	5, 014. 88
Prunes, dried fruits, nuts, land prod- uce, etc.....	792. 51
Steel (manufactured) and bessemer....	666. 88
Wine, brandy, beer, and liquors.....	5, 430. 95
Total.....	98, 884. 75
Total for same quarter in 1894..	51, 637. 27
Increase.....	47, 247. 48

Barmen.

Bralds, bindings, trimmings, etc.....	220, 221. 14
Books, stationery, photographs, and paper ware.....	14, 148. 34
Buttons and button stuffs, etc.....	34, 653. 14
Dyes, drugs, chemicals, etc.....	254, 908. 78
Fancy goods and toys.....	31, 509. 89
Hatbands and ribbons.....	226, 911. 07
Ironware, steel, cutlery, etc.....	311, 699. 19
Linen, woolen, and cotton goods.....	157, 469. 41
Machinery.....	1, 371. 30
Prunes, dried fruits, nuts, land prod- uce, etc.....	15, 937. 74
Pins and needles, and hooks and eyes..	33, 660. 93
Silk, silk goods, velvets, ribbons and braids, etc.....	322, 871. 60
Sundries.....	18, 940. 44
Total.....	1, 644, 302. 97
Total for same quarter in 1894..	981, 028. 42
Increase.....	663, 274. 55

Cologne.

Books, stationery, photographs, and paper ware.....	1, 029. 87
Clay.....	3, 659. 60
China, glass, porcelain, stone, and earthen ware.....	22, 259. 35
Cologne water.....	2, 869. 85
Dyes, drugs, chemicals, etc.....	147, 831. 52
Ironware, steel, cutlery, etc.....	3, 218. 40
Leather goods.....	47, 077. 34
Machinery.....	1, 965. 31
Mineral water.....	148, 910. 96
Prunes, dried fruits, nuts, land prod- uce, etc.....	52, 118. 73

Silk, silk goods, velvets, ribbons and braids, etc.....	\$39,068.81
Soaps and perfumery.....	2,371.53
Sundries.....	9,750.99
Steel (manufactured) and bessemer....	20,114.17
Wine, brandy, beer, and liquors.....	78,032.72
Total.....	580,279.15
Total for same quarter in 1894..	375,848.86
Increase.....	204,430.29

Crefeld.

Books, stationery, photographs, and paper ware.....	16,040.57
Dyes, drugs, chemicals, etc.....	12,314.02
Hatbands and ribbons.....	15,861.94
Linen, woolen, and cotton goods.....	4,937.99
Silk, silk goods, velvets, ribbons and braids, etc.....	799,252.51
Sundries.....	4,009.27
Wine, brandy, beer, and liquors.....	5,613.94
Total.....	858,030.24
Total for same quarter in 1894..	523,191.63
Increase.....	334,838.61

Dusseldorf.

Books, stationery, photographs, and paper ware.....	5,019.78
Caps and cartridges.....	4,199.78
China, glass, porcelain, stone, and earthen ware.....	14,339.75
Dyes, drugs, chemicals, etc.....	24,290.66
Fancy goods and toys.....	874.51
Instruments.....	276.62
Ironware, steel, cutlery, etc.....	2,211.27
Linen, woolen, and cotton goods.....	33,956.18
Machinery.....	62,104.16
Mineral water.....	573.07
Oil and glass paintings and chromos..	289.22
Silk, silk goods, velvets, ribbons, and braids, etc.....	17,644.40
Sundries.....	4,296.25
Wine, brandy, beer, and liquors.....	537.56
Total.....	170,613.21
Total for same quarter in 1894..	124,085.12
Increase.....	46,528.09

Frankfort.

Baskets and basket ware.....	140.96
Books, stationery, photographs, and paper ware.....	16,832.41
Buttons and button stuffs, etc.....	628.03
Cement.....	30,289.57
Clay.....	18,642.30
China, glass, porcelain, stone, and earthen ware.....	6,680.19
Colored, photographic, and fancy paper.....	22,986.96
Dyes, drugs, chemicals, etc.....	408,563.96
Fancy goods and toys.....	10,808.05

Gloves.....	\$13,512.85
Hatters' fur.....	13,099.24
Hair, prepared and raw.....	63,459.02
Hares' hair.....	1,628.40
Instruments.....	414.99
Ironware, steel, cutlery, etc.....	8,454.16
Jewelry and precious stones.....	6,000.22
Leather, hides, and skins.....	396,170.35
Leather goods.....	9,403.46
Linen, woolen, and cotton goods.....	5,225.04
Machinery.....	3,609.22
Mineral water.....	27,136.87
Music, musical strings, and instruments	389.29
Optical goods.....	5,998.46
Oil and glass paintings and chromos..	1,000.86
Platina wire and platinum.....	63,351.38
Seeds, plants, etc.....	177.71
Smokers' articles, snuff, cigars, and tobacco.....	3,389.84
Soaps and perfumery.....	6,768.55
Sundries.....	14,201.56
Wine, brandy, beer, and liquors.....	27,492.26
Wool.....	21,608.59
Total.....	1,208,064.25
Total for same quarter in 1894..	883,819.75
Increase.....	324,244.50

Freiburg.

Books, stationery, photographs, and paper ware.....	20,676.45
Buttons and button stuffs, etc.....	10,792.90
Cement	210.25
Dyes, drugs, chemicals, etc.....	32,771.17
Fancy goods and toys.....	20.95
Ironware, steel, cutlery, etc.....	1,798.50
Leather goods.....	901.65
Linen, woolen, and cotton goods.....	74,921.95
Machinery.....	6,962.55
Music, musical strings, and instruments	574.80
Silk, silk goods, velvets, ribbons, and braids, etc.....	5,923.75
Sundries.....	100.20
Wine, brandy, beer, and liquors.	746.05
Watches, clocks, and watchmen's detectors.....	5,832.70
Total.....	162,233.87
Total for same quarter in 1894..	114,831.80
Increase.....	47,402.07

Fürth.

Bronze powder and leaf metal.....	57,384.18
Books, stationery, photographs, and paper ware.....	7,396.96
Fancy goods and toys.....	102,763.60
Glass (plate, window, and mirror)....	271,358.86
Gold, silver, and metal paper.....	8,132.48
Hair, prepared and raw.....	1,370.20
Linen, woolen, and cotton goods.....	1,125.05
Optical goods.....	5,348.20

Prunes, dried fruits, nuts, land produce, etc.....	\$9,063.37
Smokers' articles, snuff, cigars, and tobacco.....	667.41
Sundries.....	12,340.85
Total.....	476,951.24
Total for same quarter in 1894..	417,673.07
Increase.....	59,278.17

Kehl.

Bronze powder and leaf metal.....	261.80
Books, stationery, photographs, and paper ware.....	5,601.00
Caps and cartridges.....	1,394.58
China, glass, porcelain, stone, and earthen ware.....	16,800.15
Dyes, drugs, chemicals, etc.....	9,371.68
Fancy goods and toys.....	363.85
Glass (plate, window, and mirror).....	16,912.27
Hair, prepared and raw.....	2,150.88
Ironware, steel, cutlery, etc.....	338.04
Leather, hides, and skins.....	78,960.02
Linen, woolen, and cotton goods.....	26,850.62
Prunes, dried fruits, nuts, land produce, etc.....	818.29
Silk, silk goods, velvets, ribbons and braids, etc.....	18,329.21
Smokers' articles, snuff, cigars, and tobacco.....	1,425.75
Sundries.....	664.40
Wine, brandy, beer, and liquors.....	2,516.75
Watches, clocks, and watchmen's detectors.....	269.38
Total.....	183,028.67
Total for same quarter in 1894..	135,174.77
Increase.....	47,853.90

Mannheim.

Books, stationery, photographs, and paper ware.....	2,063.08
Cement.....	38,868.95
Dyes, drugs, chemicals, etc.....	488,159.68
Glass (plate, window, and mirror).....	1,276.90
Ironware, steel, cutlery, etc.....	740.30
Leather, hides, and skins.....	327,246.73
Linen, woolen, and cotton goods.....	16,934.34
Sundries.....	20,947.46
Wine, brandy, beer, and liquors.....	76,964.09
Total.....	973,201.53
Total for same quarter in 1894..	916,444.48
Increase.....	56,757.05

Mayence.

Cement.....	80,150.96
Dyes, drugs, chemicals, etc.....	129,846.67
Ironware, steel, cutlery, etc.....	2,444.03
Jewelry and precious stones.....	66,251.11
Leather, hides, and skins.....	19,833.99
Oil and glass paintings and chromos..	1,930.26
Prunes, dried fruits, nuts, land produce, etc.....	283.22

Sundries.....	\$4,813.75
Steel (manufactured) and bessemer....	2,126.91
Wine, brandy, beer, and liquors.....	280,991.05
Total.....	588,671.95
Total for same quarter in 1894..	462,943.26
Increase.....	125,728.69

Munich.

Brushes and hair pencils.....	4,429.09
Bronze powder and leaf metal.....	1,080.92
Books, stationery, photographs, and paper ware.....	10,741.93
Dyes, drugs, chemicals, etc.....	2,917.80
Fancy goods and toys.....	1,616.54
Gold, silver, and metal paper.....	8,732.60
Gloves.....	26,048.95
Instruments.....	1,906.19
Ironware, steel, cutlery, etc.....	765.34
Leather, hides, and skins.....	3,771.30
Linen, woolen, and cotton goods.....	5,876.22
Music, musical strings, and instruments	1,747.53
Oil and glass paintings and chromos..	19,505.61
Statuary and sculpture.....	12,046.61
Sundries.....	5,641.58
Steel (manufactured) and bessemer....	5,034.80
Wine, brandy, beer, and liquors.....	28,251.07
Total.....	140,114.08
Total for same quarter in 1894..	97,741.66
Increase.....	42,372.42

Nuremberg.

Brushes and hair pencils.....	4,978.82
Bronze powder and leaf metal.....	50,012.36
Books, stationery, photographs, and paper ware.....	17,911.77
Carbons, electric.....	13,522.97
Caps and cartridges.....	1,174.01
Clay.....	303.88
China, glass, porcelain, stone, and earthen ware.....	20,848.45
Decalcomania	8,490.66
Dyes, drugs, chemicals, etc.....	11,389.96
Fancy goods and toys.....	14,138.64
Gold, silver, and metal paper.....	2,155.33
Gas-burners, lava gas tips, and brass lamps	4,214.30
Hair, prepared and raw.....	5,473.19
Hops.....	2,646.93
Instruments	7,756.99
Ironware, steel, cutlery, etc.....	21,460.46
Leonic ware.....	10,785.18
Linen, woolen, and cotton goods.....	1,998.93
Lithographic stones and materials.....	23,962.90
Music, musical strings, and instruments	7,318.68
Optical goods.....	235.28
Oil and glass paintings and chromos..	1,255.45
Slates, slate pencils, and lead pencils..	33,691.86
Smokers' articles, snuff, cigars, and tobacco.....	1,778.12

Sundries.....	\$2,583.95
Wine, brandy, beer, and liquors.....	9,710.08
Total.....	279,699.15
Total for same quarter in 1894..	218,992.86
Increase.....	60,706.29

Sonneberg.

Baskets and basket ware.....	930.75
Books, stationery, photographs, and paper ware.....	2,383.12
China, glass, porcelain, stone and earthen ware.....	275,997.87
Dyes, drugs, chemicals, etc.....	4,538.42
Fancy goods and toys.....	335,291.85
Gloves.....	4,723.19
Ironware, steel, cutlery, etc.....	5,491.33
Linen, woolen, and cotton goods.....	10,602.33
Mineral water.....	339.36
Slates, slate pencils, and lead pencils..	13,167.41
Sundries.....	941.66
Wine, brandy, beer, and liquors.....	7,805.70
Total.....	662,212.99
Total for same quarter in 1894..	413,869.00
Increase.....	248,343.99

Stuttgart.

Books, stationery, photographs, and paper ware.....	7,690.00
Corsets.....	17,602.63
Dyes, drugs, chemicals, etc.....	32,220.50
Instruments.....	10,890.75
Ironware, steel, cutlery, etc.....	5,621.57
Jewelry and precious stones.....	3,977.71
Leather, hides, and skins.....	1,058.67
Linen, woolen, and cotton goods.....	38,289.54
Music, musical strings, and instruments.....	51,810.55
Prunes, dried fruits, nuts, land produce, etc.....	17,653.39
Sundries.....	24,110.81
Wine, brandy, beer, and liquors.....	1,221.75
Watches, clocks, and watchmen's detectors.....	1,471.55
Total.....	213,619.42
Total for same quarter in 1894..	164,665.53
Increase.....	48,953.89

Weimar.

Books, stationery, photographs, and paper ware.....	4,747.22
China, glass, porcelain, stone, and earthen ware.....	37,407.61
Dyes, drugs, chemicals, etc.....	5,727.47
Fancy goods and toys.....	52,700.12
Gloves.....	9,210.23
Hair, prepared and raw.....	997.14
Linen, woolen, and cotton goods.....	25,680.52
Optical goods.....	4,505.06
Seeds, plants, etc.....	929.78

Smokers' articles, snuff, cigars, and tobacco.....	\$2,874.30
Sundries.....	3,425.02
Wine, brandy, beer, and liquors.....	752.30
Watches, clocks, and watchmen's detectors.....	3,011.77
Total.....	151,968.54
Total for same quarter in 1894..	93,778.06
Increase.....	58,190.48

Total from Frankfort and consulates thereunder.

Braids, bindings, trimmings, etc.....	220,221.14
Baskets and basket ware.....	46,230.44
Brushes and hair pencils.....	9,407.91
Bronze powder and leaf metal.....	108,839.26
Books, stationery, photographs, and paper ware.....	189,933.72
Buttons and button stuffs, etc.....	50,634.27
Carbons, electric.....	13,936.75
Caps and cartridges.....	6,768.37
Cement.....	149,519.73
Clay.....	22,605.78
China, glass, porcelain, stone, and earthen ware.....	435,230.97
Corsets.....	17,602.63
Cologne water.....	2,869.85
Colored, photographic, and fancy paper.....	22,986.46
Decalcomania.....	8,490.66
Dyes, drugs, chemicals, etc.....	1,598,975.29
Fancy goods and toys.....	550,083.00
Glass (plate, window, and mirror).....	293,039.53
Gold, silver, and metal paper.....	19,080.41
Gas-burners, lava gas tips, and brass lamps.....	4,214.30
Gloves.....	53,495.22
Hatters' fur.....	13,099.24
Hatbands and ribbons.....	242,773.01
Hair, prepared and raw.....	73,450.49
Hares' hair.....	1,628.40
Hops.....	7,661.81
Instruments.....	21,245.54
Ironware, steel, cutlery, etc.....	364,242.59
Jewelry and precious stones.....	76,229.04
Leather, hides, and skins.....	827,041.06
Leather goods.....	57,382.45
Leonic ware.....	10,785.18
Linen, woolen, and cotton goods.....	642,734.48
Lithographic stones and materials.....	23,962.90
Machinery.....	76,012.54
Mineral water.....	182,868.62
Music, musical strings, and instruments.....	61,840.85
Optical goods.....	16,087.00
Oil and glass paintings and chromos..	23,781.40
Platina wire and platinum.....	63,361.38
Prunes, dried fruits, nuts, land produce, etc.....	114,146.91
Pins and needles and hooks and eyes..	80,068.03
Seeds, plants, etc.....	1,107.49
Slates, slate pencils, and lead pencils.....	46,859.27

Silk, silk goods, velvets, ribbons and braids, etc.....	\$1,203,090.28
Smokers' articles, snuff, cigars, and tobacco.....	10,135.42
Soaps and perfumery.....	9,140.08
Statuary and sculpture.....	12,046.61
Sundries.....	138,761.34
Steel (manufactured) and bessemer....	27,942.76
Wine, brandy, beer, and liquors.....	526,066.27
Watches, clocks, and watchmen's de- tectors.....	10,585.40
Wool.....	21,608.59
Total.....	8,811,847.18
Total for same quarter in 1894..	6,153,296.83
Increase.....	2,658,550.35

GIBRALTAR.

[Report by Consul Sprague.]

Bric-a-brac.....	176.73
Cork wood.....	2,443.00
Goatskins.....	104.99
Oil paintings.....	485.39
Wines.....	395.64
Total.....	3,605.75
Total for same quarter in 1894..	11,807.04
Decrease.....	8,201.29

GREECE.

[Report by Consul-General Alexander.]

Athens.

Busts, marble.....	140.00
Increase.....	140.00

Patras.

Currants.....	80,941.10
Olives.....	2,362.02
Sundries.....	652.58
Total.....	83,955.70
Total for same quarter in 1894..	119,754.32
Decrease.....	35,798.62

Piræus.

Bricks (fire, magnesian).....	2,631.90
Cheese.....	213.90
Cognac.....	290.85
Magnesite (calcined).....	303.60
Olives.....	101.40
Sponges.....	15,367.10
Wine.....	242.70
Total.....	19,151.45
Total for same quarter in 1894..	17,298.60
Increase.....	1,852.85

Total from Greece.

Bricks (fire, magnesian).....	2,631.90
Busts, marble.....	140.00

Cheese.....	\$213.90
Cognac.....	290.85
Currants.....	80,941.10
Magnesite (calcined).....	303.60
Olives.....	2,463.42
Sponges.....	15,367.20
Wine.....	242.70
Sundries.....	652.58
Total.....	103,247.15
Total for same quarter in 1894..	137,052.92
Decrease.....	33,805.77

ITALY.

[Report by Consul-General Jones.]

Castellamare di Stabia.

Anchovies.....	231.52
Artichokes.....	474.90
Beans.....	104.40
Cheese.....	35,688.87
Chick-pease.....	138.79
Garlic.....	3,114.57
Hams.....	381.00
Lemons.....	4,352.33
Macaroni.....	68,650.88
Olives.....	124.60
Olive oil.....	4,248.94
Oranges.....	67,762.37
Onions.....	194.80
Sundries.....	710.84
Walnuts.....	192.72
Wine.....	2,289.19
Total.....	188,660.72
Total for same quarter in 1894..	53,646.21
Increase.....	135,014.51

Catania.

Almonds.....	2,953.07
Asphalt.....	9,549.08
Brimstone.....	25,072.35
Canary seed.....	1,094.86
Cheese.....	108.71
Filberts.....	2,105.50
Lemons, fresh.....	57,180.69
Licorice (paste).....	2,430.85
Olives.....	5.55
Olive oil.....	161.49
Oranges.....	31,182.10
Sulphur.....	2,821.10
Crude.....	1,578.00
Vegetables in salt.....	9.17
Wine lees.....	5,523.70
Total.....	141,776.22
Total for same quarter in 1894..	115,685.20
Increase.....	26,091.02

Florence.

Alabaster (wrought).....	6,919.20
Antiquities.....	6,554.00
Art, works of.....	15,929.09

320 . EXPORTS DECLARED FOR THE UNITED STATES.

Baskets	\$144. 89
Bees	115. 80
Books	1,249. 40
Bronzes	821. 60
Copper manufactures.....	327. 10
Earthenware	710. 40
Furniture.....	2,988. 65
Glass.....	53. 80
Hemp, tow.....	42,535. 45
Household goods.....	7,151. 00
Ironware	243. 20
Majolica.....	355. 18
Marble statuary	15,394. 40
Medicines	284. 40
Mosaics	1,799. 20
Olive oil.....	238. 20
Photographs	370. 00
Plaster.....	31. 20
Porcelain.....	202. 63
Sausages.....	281. 67
Seeds.....	3,248. 95
Silverware.....	1,403. 75
Skins.....	5,465. 00
Straw :	
Braids.....	28,705. 22
Hats	115,542. 19
Unclassified	3,740. 10
Terra cotta.....	532. 40
Wine lees.....	5,356. 55
Total.....	268,689. 33
Total for same quarter in 1894..	115,685. 20
Increase.....	153,004. 13

Genoa.

Anchovies.....	1,125. 80
Cheese.....	17,111. 80
Castor oil.....	122. 20
Corks	614. 28
Earthenware	264. 79
Filigree.....	201. 93
Fish (in oil).....	322. 10
Glycerin.....	32,877. 53
Gum, arabic.....	141. 00
Hides	22,847. 40
Liquors.....	2,004. 00
Marble, worked.....	750. 00
Mushrooms.....	688. 24
Olive oil.....	42,176. 67
Paints.....	293. 43
Plumbago	219. 78
Preserves.....	68. 24
Pumice stone.....	1,780. 74
Rice.....	4,779. 29
Sausages.....	437. 00
Semoule.....	153. 66
Silk (raw).....	18,583. 35
Skins.....	5,739. 17
Soap.....	584. 86
Sundries.....	290. 39
Tannin extract.....	143. 33
Towels.....	523. 84
Velvets.....	381. 66
Vegetable ivory.....	1,308. 79
Waste.....	51,293. 85

Wine.....	\$3,364. 37
Wool, natural.....	61. 00
Total.....	211,254. 49
Total for same quarter in 1894..	234,805. 34
Decrease.....	23,550. 85

Leghorn.

Alabaster (wrought).....	1,555. 18
Anchovies.....	48. 25
Argols.....	55,076. 72
Beeswax	2,102. 87
Boracic acid.....	7,645. 46
Brier wood.....	5,077. 63
Cheese.....	16,623. 53
Citron :	
Candied.....	4,730. 84
In brine.....	593. 43
Castor oil.....	373. 38
Earth, sienna.....	1,044. 54
Umber	2,120. 85
Glass plates.....	1,106. 61
Hemp.....	13,247. 91
Herbs.....	161. 96
Hides	2,074. 49
Juniper berries.....	487. 72
Macaroni	11. 16
Marble :	
Blocks.....	111,810. 05
Chippings	1,734. 28
Slabs.....	41,785. 58
Statuary.....	11,557. 47
Worked	2,364. 00
Mushrooms.....	46. 32
Olive oil.....	84,299. 33
Orris root.....	3,341. 56
Olive nuts (ground).....	578. 07
Paints.....	212. 12
Peanuts	978. 04
Pumice stone.....	9,346. 73
Rags.....	25,456. 99
Rice	40. 14
Sausages	356. 27
Soap	46,546. 68
Soap stock.....	22,513. 29
Sundries	329. 99
Talc.....	908. 99
Wine.....	2,308. 95
Total.....	480,617. 88
Total for same quarter in 1894..	487,874. 23
Increase.....	7,256. 35

Messina.

Almonds	2,523. 00
Argols.....	17,004. 00
Artichokes.....	61. 00
Citrate of lime.....	3,749. 00
Citron (in brine).....	1,125. 00
Castor oil.....	12. 00
Capers	9. 00
Essences	62,669. 00
Filberts.....	9,696. 00

Lemons	\$320,602.00
Essence	20,775.00
In brine.....	1,153.00
Juice.....	8,761.00
Peel.....	267.00
Macaroni.....	190.00
Mustard seed.....	2,146.00
Olives.....	367.00
Olive oil.....	2,236.00
Oranges.....	145,602.00
Peel.....	338.00
Pumice stone.....	4,409.00
Silk (raw).....	17,093.00
Squills	120.00
Wine	153.00
Wine lees.....	12,589.00
Wine argols.....	1,023.00
Total.....	634,672.00
Total for same quarter in 1894..	487,874.23
Increase.....	146,797.77

Milan.

Books.....	392.68
Buttons.....	7,619.86
Cheese	5,561.99
Church goods.....	193.00
Dyestuffs.....	3,558.70
Furniture.....	123.15
Gloves	24,627.23
Hair (horse).....	3,534.40
Hats	1,752.28
Hatbands	10,441.93
Hemp (yarns).....	4,843.74
Hides	3,422.66
Images, colored.....	720.05
Liquors.....	4,176.11
Medicines	1,369.03
Mineral water.....	424.60
Olive oil.....	1,417.44
Paintings.....	48.25
Rubber goods.....	322.36
Silverware.....	144.88
Silk:	
Manufactures.....	68,871.07
Raw	1,629,905.59
Waste.....	7,523.93
Total.....	1,780,502.03
Total for same quarter in 1894..	1,230,831.62
Increase.....	549,670.41

Naples.

Almonds.....	4,976.50
Argols.....	116,398.56
Books	123.37
Bronzes	2,386.15
Cheese.....	478.28
Cuttlefish bones.....	436.14
Carriages.....	263.96
Flags.....	117.60
Garlic.....	2,868.37
Gloves	28,478.61
Hair (human).....	4,893.24

Hemp.....	\$268.51
Hides.....	22,201.87
Household goods.....	461.30
Lemons	59,557.27
Licorice	1,423.00
Macaroni.....	3,525.09
Marble, blocks.....	338.24
Musical instruments.....	672.60
Strings.....	353.00
Olive oil.....	9,477.77
Oranges.....	133,138.21
Preserves.....	2,482.50
Seeds	2,876.10
Skins.....	12,030.03
Snuff.....	290.50
Soap.....	2,582.55
Soap stock.....	16,836.35
Sulphur (oil).....	17,028.25
Sweets	28,776.80
St. John's bread.....	32.85
Terra cotta.....	374.73
Tortoise shell.....	294.60
Wine.....	3,133.76
Wood manufactures.....	113.00
Total.....	579,559.56
Total for same quarter in 1894..	352,181.23
Increase.....	227,378.33

Palermo.

Almonds	1,213.80
Asphalt	4,220.00
Brimstone	226,769.76
Cheese	3,820.79
Citrate of lime.....	18,709.70
Cosmetics	459.58
Essences	5,777.85
Fish (salted).....	335.36
Groceries.....	524.69
Lemons:	
Fresh	1,313,509.92
Juice.....	503.45
Macaroni.....	14,232.31
Manna	124.80
Olives.....	374.28
Olive oil.....	3,449.38
Oranges.....	116,624.65
Orange peel.....	575.77
Salt.....	27,419.21
Soap stock.....	7,314.98
Sumac	76,975.52
Sundries.....	1,298.96
Wine.....	3,468.37
Wool manufactures.....	242.00
Total.....	1,828,005.93
Total for same quarter in 1894..	1,815,306.20
Increase.....	12,699.73

Rome.

Antiquities.....	7,136.94
Argols.....	4,603.39
Books	105.95
Bronzes	743.05

Cheese.....	\$21,026.43
Church goods.....	1,042.97
Clocks.....	54.04
Curios.....	840.53
Earth, sienna.....	1,312.75
Furniture.....	725.68
Household goods.....	2,604.36
Marble (statuary).....	32,094.35
Mosaics.....	1,008.42
Paintings.....	9,411.45
Plaster casts.....	868.88
Silk (raw).....	16,574.98
Tapestries.....	217.31
Terra cotta.....	210.75
Wine.....	365.34
Total.....	100,826.67
Total for same quarter in 1894..	71,266.48
Increase	29,560.19

Turin.

Chocolate	238.97
Granite, manufactures.....	1,447.50
Gunstocks.....	971.72
Hair :	
Cloth.....	7,938.81
Human	3,036.38
Machinery.....	579.00
Matches	105.45
Plumbago.....	336.67
Silk :	
Manufactures.....	2,277.65
Raw	60,212.35
Talc	408.19
Vermuth	61,586.75
Wine.....	485.19
Total.....	139,624.63
Total for same quarter in 1894..	52,283.95
Increase	87,340.68

Venice.

Antiquities.....	11,319.20
Books	450.00
Bronzes	700.00
Earthenware.....	456.77
Furniture.....	3,631.64
Garlic.....	174.94
Hemp.....	39,695.13
Household goods.....	852.60
Jewelry	116.00
Lace.....	110.00
Majolica	162.45
Paintings.....	822.40
Porcelain.....	180.00
Skins.....	10,612.29
Statuary.....	467.00
Straw (braids).....	460.00
Sundries.....	3,474.81
Wine.....	731.50
Total.....	74,416.73
Total for same quarter in 1894..	33,303.15
Increase	41,113.58

Total from Italy.

Alabaster, wrought.....	\$8,474.38
Almonds.	11,666.37
Anchovies.....	1,405.57
Antiquities.....	25,310.14
Argols.....	193,082.67
Art, works of.....	15,929.02
Artichokes.....	535.90
Asphalt	13,769.08
Baskets.....	144.59
Beans	104.40
Bees	115.80
Beeswax	2,102.87
Books.....	2,321.41
Boracic acid.....	7,645.46
Brier wood.....	5,077.63
Brimstone.....	251,842.11
Bronzes	4,650.80
Buttons	7,619.86
Canary seed.....	1,054.86
Cheese.....	100,480.20
Church goods.....	1,235.97
Citrate of lime.....	22,458.70
Citron :	
Candied.....	4,730.84
In brine.....	1,718.43
Copper manufactures.....	327.10
Cosmetics	459.58
Cuttlefish bones.....	436.14
Chick-pease	138.74
Chocolate	238.97
Castor oil.....	507.58
Corks	614.28
Capers	9.00
Carriages.....	263.96
Clocks	54.04
Curios.....	810.53
Dyestuffs.....	3,558.79
Earthenware	1,431.76
Earth :	
Sienna.....	2,357.29
Umber.....	2,120.85
Essences	68,446.85
Filberts.....	11,801.50
Filigree.....	201.93
Fish :	
In oil.....	322.10
Salted.....	235.36
Furniture	7,469.12
Flags.	117.60
Garlic.....	6,157.84
Glass.....	53.80
Gloves.....	53,105.84
Glycerin.....	32,877.53
Granite, manufactures.....	1,447.50
Groceries.....	524.69
Gum arabic.....	141.00
Gunstocks	971.72
Glass plates.....	1,106.61
Hair :	
Cloth.....	7,938.81
Horse.....	3,534.40
Human.....	7,929.62
Hams.....	381.00
Hats.....	1,752.26

Hatbands.....	\$10,441.93
Hemp	53,211.55
Tow	42,535.45
Yarns	4,843.74
Herbs.....	161.96
Hides	50,546.42
Household goods.....	11,069.26
Ironware.....	243.20
Jewelry	116.00
Juniper berries.....	487.72
Images, colored.....	120.05
Lace.....	110.00
Lemons	384,511.60
Essence	20,755.00
Fresh	1,370,690.61
In brine.....	1,153.00
Juice.....	9,264.65
Peel.....	267.00
Licorice	1,403.00
Paste.....	2,430.85
Liquors	6,180.11
Macaroni.....	86,589.44
Machinery.....	579.00
Majolica.....	517.63
Manna.....	124.80
Marble :	
Blocks	112,148.29
Chippings	1,764.88
Slabs.....	41,785.58
Statuary.....	59,046.22
Worked	3,114.00
Matches.....	105.45
Medicines	1,653.43
Mosaics	3,807.62
Mushrooms.....	734.56
Musical instruments.....	672.60
Musical strings.....	353.00
Mustard seed.....	2,146.00
Mineral water.....	424.60
Olives.....	871.43
Olive oil.....	147,499.22
Oranges	350,163.35
Orange peel.....	913.77
Onions.....	194.80
Orris root.....	3,341.56
Olive nuts (ground).....	578.07
Paintings.....	10,282.10
Paints.....	505.55
Peanuts	978.04
Photographs.....	370.00
Plaster.....	31.20
Plaster casts.....	868.88
Plumbago	556.45
Porcelain.....	322.63
Preserves.....	2,550.74
Pumice stone.....	15,536.47
Rags	25,456.99
Rice	4,819.43
Rubber goods.....	222.36
Salt.....	27,419.21
Sausages.....	1,074.94
Seeds	6,125.05
Semoule.....	153.66
Silverware.....	1,548.63
Silk	
Manufactures	71,148.72

Silk—Continued.	
Raw.....	\$1,742,369.25
Waste.....	7,523.93
Skins.....	33,846.48
Snuff.....	290.50
Soap.....	49,714.09
Soap stock.....	46,664.62
Squills	120.00
Statuary.....	467.00
Straw :	
Braids.....	29,165.22
Hats.....	115,542.19
Unclassified.....	3,074.10
Sulphur	2,821.10
Crude.....	1,578.00
Oil.....	17,018.25
Sumac.....	76,975.52
Sundries	6,104.97
Sweets.....	28,776.80
St. John's bread.....	32.85
Tannin extract.....	143.33
Talc.....	1,319.18
Tapestries.....	217.31
Terra cotta.....	1,117.88
Tortoise shell.....	294.60
Towels.....	523.84
Vegetables in salt.....	9.17
Velvets.....	381.66
Vermuth	61,586.75
Vegetable ivory.....	1,308.79
Waste.....	51,293.85
Walnuts.....	192.72
Wine.....	16,299.67
Wine lees.....	23,469.25
Wood, natural.....	113.00
Wool :	
Natural	61.00
Manufactures.....	242.00
Wine argols.....	1,023.00
Total.....	6,428,606.19
Total for same quarter in 1894..	5,446,242.10
Increase.....	982,364.09

JAPAN.

[Report by Consul-General McIvor.]

*Kanagawa.**

Bone (whale).....	4,276.77
Brimstone.....	157,337.20
Cotton goods.....	64,003.89
Curios.....	423,397.81
Dried ginger.....	2,251.48
Fish.....	1,137.03
Manganese.....	26,876.04
Marble.....	1,225.60
Menthol.....	29,660.75
Miscellaneous.....	16,695.44
Mushrooms.....	1,786.75
Oils	5,717.56
Oranges.....	317.98
Paper goods.....	54,216.78
Plants.....	21,649.20

* Year ending June 30, 1895.

Silk:	
Goods.....	\$4,872,607.61
Raw.....	11,222,972.71
Skins.....	43,051.05
Straw braid.....	101,052.38
Sulphur.....	2,997.85
Tea.....	2,918,155.89
Total.....	19,971,387.77

LUXEMBURG.

[Report by Vice-Commercial Agent Murphy.]

Brandy.....	149.82
Leather gloves.....	37,113.78
Rose plants.....	264.41
Wine.....	266.34
Total.....	37,794.35

MEXICO.

MEXICO CITY.

[Report by Consul-General Crittenden.]

Antiquities.....	1,500.00
American goods returned.....	5,444.00
Bullion:	
Gold and silver.....	297,393.24
Silver.....	3,483.10
Silver and lead.....	5,030.00
Brown root or broom root.....	2,068.45
Bladders (fish).....	31.89
Bark, tan.....	1,489.30
Corn leaves.....	13.58
Curios (Mexican).....	110.10
Cedar and mahogany.....	132,971.23
Chicle (chewing gum).....	228,678.00
Coffee.....	1,565.49
Coin (gold).....	2,534.00
Damiana.....	741.42
Fruits (various).....	70.98
Fustic.....	1,846.40
Feathers.....	7,609.10
Horns (cattle).....	1,700.00
Hennequen.....	125,342.97
Hemp.....	665,921.34
Hair.....	630.41
Hides (beef).....	27,793.30
Jewels (precious).....	4,671.17
Jewelry (old gold).....	300.00
Honey.....	4,765.87
Logwood.....	1,385.35
Orchilla weeds.....	285.65
Onyx novelties.....	117.00
Ore (gold and silver).....	411,605.42
Rags, woolen.....	715.40
Rubber.....	6,047.50
Skins:	
Birds.....	237.00
Alligator.....	763.84
Goat.....	765.92
Lizard.....	34.00
Deer.....	11,378.90
Pig.....	64.76

Sarsaparilla.....	\$833.41
Shark fins.....	504.27
Sugar, crude.....	3,346.03
Shells:	
Pearl.....	8,686.59
Tortoise.....	788.30
Vanilla.....	19,708.42
Total.....	1,990,973.19

NUEVO LAREDO AND CONSULATES THERE-
UNDER.

[Report by Consul-General Donnelly.]

Chihuahua.

Animals, live.....	12,869.43
Beans.....	1,002.52
Bullion:	
Gold.....	115,240.67
Silver.....	159,950.55
Silver and lead mixed.....	82,609.33
Concentrates.....	134.30
Hats:	
Wool.....	311.71
Straw.....	318.70
Hides.....	6,869.14
Merchandise.....	522.61
Oranges.....	404.61
Ore (silver).....	149,717.89
Total.....	529,951.66
Total for same quarter in 1894..	305,517.87
Increase.....	224,433.79

Durango.

Base bullion.....	200,350.05
Beans.....	4,041.64
Block tin.....	6,484.75
Bran (wheat).....	609.96
Cotton seed:	
Oil cake.....	5,061.38
Linters.....	1,383.75
Hides.....	12,685.03
Ores (silver).....	116,656.50
Total.....	347,273.06
Total for same quarter in 1894...	300,068.00
Increase.....	47,205.06

Guaymas.

Base bullion.....	383,933.00
Cyanides.....	14,213.00
Chick pease (Garbanzos).....	740.00
Hides.....	2,693.00
Leather (sole).....	10,057.00
Ores:	
Gold.....	10,304.00
Silver.....	259,539.00
Silver sulphides.....	2,350.00
Salt.....	724.00
Shark fins.....	125.00
Total.....	684,678.00

Matamoros.

Asphaltum	\$48.38
Animals, live.....	13,098.22
Beans	104.98
Corn.....	1,905.51
Cocoa.....	2.44
Coffee	854.30
Feathers.....	31.00
Hair (horse and cow).....	3,806.00
Hides.....	21,862.47
Ixtle (fiber).	276.23
Leather (sole)	156.08
Horns.....	332.59
Pease	30.00
Pepper.....	28.00
Saddles.....	8.00
Shoes	284.62
Skins :	
All kinds.....	11,131.13
Tanned.....	394.85
Sugar, crude.....	1,308.45
Thread, spool.....	8.00
Wax (bees').....	181.03
Total.....	55,852.28
Total for same quarter in 1894..	11,041.43
Increase.....	44,810.85

Nogales.

Bullion :	
Copper (228,885 pounds).....	10,899.00
Gold (3 bars).....	5,954.00
Silver (13 bars).....	6,396.00
Cattle (4,866 head).....	22,394.00
Ores :	
Gold (78,890 pounds).....	3,002.00
Silver (2,679,850 pounds).....	162,096.00
Panocha (2,800 pounds).....	110.00
Pearls.....	6,000.00
Rubber belting.....	600.00
Sheep (1,305 head).....	847.00
Sugar (4,290 pounds).....	170.00
Total.....	218,468.00
Total for same quarter in 1894..	282,665.00
Decrease.....	64,197.00

Nuevo Laredo.

American products returned.....	8,471.15
Animals, live :	
Steers.....	\$39,592.00
Cows.....	17,647.80
Bulls.....	8,218.50
Calves	1,301.50
Heifers.....	335.00
Horses	286.00
	67,380.80
Argentiferous lead.....	3,040,470.33
Baskets.....	28.75
Books (printed).....	41.02
Bran (wheat).....	1,949.67
Bricks (clay).....	162.25
Bristles (hog).....	600.00
Corn.....	2,189.95
Garlic.....	76.45

Hair (horse and cow).....	\$7,234.57
Hats, palm leaf.....	560.77
Hides and skins.....	122,655.35
Horns.....	104.75
Ixtle (fiber).....	20,836.07
Leather (sole).....	637.37
Morrales (ixtle bags).....	213.70
Ores, silver and lead.....	10,246.50
Parrots.....	258.78
Pease	248.98
Pepper.....	4,867.25
Sarsaparilla	297.33
Seeds.....	46.98
Sugar, crude.....	5,604.78
Wool.....	16,102.11
Total.....	3,311,285.66
Total for same quarter in 1894..	2,413,549.94
Increase.....	897,735.72

Paso del Norte.

American products returned.....	8,450.00
Animals, live.....	41,110.00
Beans.....	616.00
Books.....	146.00
Bullion :	
Gold	7,742.00
Silver	75,008.00
Blankets, wool.....	23.00
Bonds, Mexican Government.....	596.00
Coffee.....	5,931.00
Feathers, crude.....	182.00
Hats :	
Fur	123.00
Straw	965.00
Hides.....	2,091.00
Household effects.....	690.00
Leather shoes.....	483.00
Ores	62,160.00
Rebozos (shawls).....	35.00
Total.....	206,351.00
Total for same quarter in 1894..	203,342.00
Increase.....	3,009.00

Piedras Negras.

American products returned.....	31,204.25
Animals, live	55,475.00
Bullion (silver).....	3,019.50
Coal.....	29,761.50
Coffee.....	175.00
Cotton-seed meal.....	111.00
Feathers (herron).....	510.00
Hats (straw).....	168.63
Hides and skins.....	21,674.20
Hair (horse and cow).....	887.00
Ores :	
Silver and lead.....	99,719.84
Silver	14,931.78
Total.....	257,637.70
Total for same quarter in 1894..	187,367.00
Increase.....	70,270.70

San Luis Potosi.

Bones	\$615.00
Bullion:	
Gold	55,298.08
Silver	459,494.07
Coffee	1,350.00
Copper matte	8,459.63
Jalap.	384.00
Hair (horse and cow)	500.00
Ixtle (fiber)	12,530.00
Lead	43,859.81
Ores	146,198.65
Ores (antimony)	511.87
Pepper (capsicum)	1,041.75
Skins, goat	50,056.80
Total	780,299.66
Total for same quarter in 1894..	712,712.00
Increase	67,577.66

Saltillo.

American products returned	710.00
Beans	898.87
Bran (wheat)	2,151.10
Cotton-seed meal and oil cake	3,465.70
Cotton waste	887.22
Copper bullion and matte	101,802.07
Hair (horse and cow)	5,376.30
Hides and skins	45,878.90
Ixtle (fiber)	19,796.27
Ores (silver)	8,893.97
Total	186,860.45
Total for same quarter in 1894..	251,597.95
Decrease	61,736.60

Tampico.

American products returned	200.00
Bullion:	
Silver	62,913.00
Lead	9,804.00
Bones and horns	2,453.00
Chicle (chewing gum)	4,177.00
Cedar	2,409.00
Coffee	41,320.00
Fustic (dyewood)	18,899.00
Hair, horse and cow	3,565.00
Hides	29,882.00
Honey	12,665.00
Ixtle (fiber)	38,589.00
Plumes	2,419.00
Skins:	
Alligator	160.00
Wild boar	1,289.00
Deer	1,841.00
Goat	13,031.00
Sarsaparilla	11,148.00
Rubber	204.00
Turtle (green), live	243.00
Wax	242.00
Total	262,824.00
Total for same quarter in 1894..	212,896.00
Increase	49,928.00

Total from Nuevo Laredo and consulates thereunder.

American products returned	\$49,035.40
Animals, live	213,174.45
Argentiferous lead	3,040,470.33
Asphaltum	48.38
Baskets, willow	28.78
Beans	6,664.01
Blankets, wool	23.00
Block tin	6,484.75
Books, printed	187.20
Bones and horns	3,505.34
Bran (wheat)	4,710.73
Bricks, clay	162.25
Bristles, hog	600.00
Base bullion	584,283.05
Bullion:	
Gold	184,234.95
Silver	766,781.12
Silver and lead mixed	82,609.33
Copper and matte	121,160.70
Cedar, wood	2,409.00
Coal	29,761.50
Cocoa	2.44
Coffee	49,630.30
Chicle (chewing gum)	4,177.00
Concentrates	134.30
Corn	4,095.46
Cotton-seed meal and cake	10,021.88
Cotton waste	887.22
Cyanides	14,213.00
Fustic (dyewood)	18,809.00
Feathers	723.00
Garlic	76.45
Hair (horse and cow)	21,368.87
Hats, straw and wool	2,447.81
Hides and skins	243,889.99
Honey	12,665.00
Household effects	690.00
Ixtle (fiber)	97,398.57
Jalap.	384.00
Lead	53,663.81
Leather, sole	10,850.45
Morrales (ixtle bags)	213.70
Merchandise	522.61
Oranges	404.61
Ores:	
Silver	773,995.14
Gold	13,306.00
Silver and lead	256,164.99
Antimony	511.87
Parrots	258.78
Pearls	6,000.00
Pease	1,018.98
Pepper	5,937.00
Plumes	2,419.00
Rebozos (shawls)	35.00
Rubber	204.00
Rubber belting	600.00
Saddles	8.00
Salt	724.00
Sarsaparilla	11,445.33
Silver sulphides	2,350.00
Shark fins	125.00
Seeds	46.98

Sugar, crude.....	\$7,193.23
Shoes.....	767.62
Skins (tanned).....	394.85
Thread, spool.....	8.00
Turtle (green), live.....	243.00
Wax.....	423.03
Wool.....	16,102.11
Mexican Government bonds.....	596.00
Total*	6,844,489.47

NEW ZEALAND

[Report by Consul Connolly.]

Chamois skins.....	347.00
Coffee.....	3,510.00
Gum (kauri).....	366,412.00
Hides.....	951.00
Horns.....	388.00
Mutton casings.....	79,781.00
Pelts.....	219.97
Skins:	
Sheep.....	6,410.00
Rabbit.....	9,220.00
Vanilla.....	486.00
Wool.....	3,510.00
Total	493,012.00

NICARAGUA.

[Report by Consul O'Hara.]

Bluefields.

Bananas (873,000 bunches).....	440,592.39
Coffee (3 bags).....	99.55
Gold dust (1,906 ounces).....	23,095.74
Hides (52 bales).....	499.98
Limes (1 barrel).....	4.68
Oranges (half a barrel).....	2.60
Rubber (1,115 bales).....	57,872.47
Tuna (54 bales).....	699.48
American products returned.....	552.55
Total	523,419.44

San Juan del Norte.

Cocoanuts (364 bags=29,120 nuts).....	291.20
Coffee (6,691 bags=908,507 pounds)...	136,275.55
Feathers (1 box=10¼ ounces).....	96.25
Gold dust (8 packages=690½ ounces)..	8,284.00
Hides (241 bales=29,791 pounds).....	2,370.02
Indigo (1 ceroon=164 pounds).....	73.80
Printing type, old (5 boxes).....	(†)
Rubber (559 bales=60,150 pounds)....	27,706.86
Skins:	
Alligator (1 bale=33 pounds).....	10.00
Deer (76 bales=9,735 pounds).....	2,272.35
Total	177,380.03
Grand total	700,799.47
Total for same quarter in 1894..	362,227.51
Decrease	172,979.23

RUSSIA.

[Report by Consul-General Karel.]

Batoum.

Licorice root.....	\$57,273.86
Manganese ore.....	123,745.22
Sundries.....	59.98
Wool.....	8,169.22
Total	189,248.28
Total for same quarter in 1894..	362,227.51
Decrease	172,979.23

Libau.

Calfskins.....	4,757.18
Camels' hair.....	118,147.51
Total	122,904.59
Total for same quarter in 1894..	61,915.57
Increase	60,989.02

Moscow.

Calfskins.....	4,788.09
Camels' hair.....	2,659.13
Flax.....	1,483.62
Goatskins.....	136,803.49
Haircloth.....	1,150.47
Horsehair.....	1,582.22
Horse manes.....	372.41
Lycopodium.....	1,292.07
Napkins.....	62.07
Tea.....	71.17
Terra-cotta ware.....	2,577.68
Wooden articles.....	155.56
Wool.....	57,602.59
Total	210,600.57
Total for same quarter in 1894..	98,231.00
Increase	112,369.57

Odessa.

Goatskins.....	91,060.77
Wool.....	16,420.99
Total	107,481.76
Total for same quarter in 1894..	40,445.91
Increase	67,035.85

Riga.

Albumen (blood).....	1,777.04
Books.....	2,443.86
Cork shavings.....	1,424.74
Dressed leather.....	449.47
Flax.....	2,769.89
Hemp.....	28,121.74
Liquors.....	1,145.90
Rennets.....	901.12
Rubber waste.....	1,571.65
Skins.....	67,198.85
Total	107,804.26
Total for same quarter in 1894..	27,078.65
Increase	80,725.61

* Included in the totals are the Guaymas returns, for which no figures are available for the same quarter in 1894. Deducting the Guaymas exports from the totals for the 1895 quarter, leaves the following results: Quarter ending June 30, 1895, \$6,159,811.47; for same quarter in 1894, \$4,880,756.29; increase, \$1,279,055.18.

† Value unknown.

Rostoff.

Wool.....	\$7,220.22
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St. Petersburg.

Albumen (blood).....	6,000.00
Birch tar.....	108.32
Boltropes.....	7,649.30
Books.....	500.00
Bristles.....	73,279.92
Bronze and stone articles.....	414.40
Church articles.....	1,606.28
Crash.....	1,685.00
Dressed leather.....	561.37
Flax.....	153,083.57
Goatskins.....	2,753.10
Gold articles.....	732.00
Hides.....	10,544.52
Isinglass.....	1,040.00
Madder.....	404.80
Mail plates.....	200.00
Oakum.....	4,528.50
Ravens'-duck.....	358.75
Sheet iron.....	3,489.65
Tow.....	7,112.23
Total.....	276,051.71
Total for same quarter in 1894..	107,948.99
Increase.....	158,102.72

Total from Russia.

Albumen (blood).....	7,777.04
Birch tar.....	108.32
Boltropes.....	7,649.30
Books.....	2,943.86
Bristles.....	73,279.92
Bronze and stone articles.....	414.40
Caltskins.....	9,545.27
Camels' hair.....	120,806.64
Church articles.....	1,606.28
Cork shavings.....	1,424.74
Crash.....	1,685.00
Dressed leather.....	1,010.84
Flax.....	157,337.08
Goatskins.....	230,617.37
Gold articles.....	732.00
Harcloth.....	1,150.47
Hemp.....	28,121.74
Hides.....	10,544.52
Horsehair.....	1,582.22
Horse manes.....	372.41
Isinglass.....	1,040.00
Licorice root.....	57,273.86
Liquors.....	1,145.90
Lycopodium.....	1,292.07
Madder.....	404.80
Mail plates.....	200.00
Manganese ore.....	123,745.22
Napkins.....	62.07
Oakum.....	4,528.50
Ravens'-duck.....	358.75
Rennets.....	901.12
Rubber waste.....	1,571.65
Sheet iron.....	3,489.65

Skins.....	\$67,198.85
Sundries.....	59.93
Tea.....	71.17
Terra-cotta ware.....	2,577.68
Tow.....	7,112.23
Wooden articles.....	155.56
Wool.....	89,413.02
Total.....	1,021,311.49
Total for same quarter in 1894..	796,766.09
Increase.....	224,545.40

SPAIN.

[Report by Consul-General Bowen.]

Alicante.

Almonds.....	17,578.77
Capers.....	154.25
Figs.....	4.42
Licorice.....	331.96
Olive oil.....	973.80
Vinegar.....	11.60
Wine.....	83.00
Total.....	19,137.80

Barcelona.

Almonds.....	24,465.52
Bags.....	6,759.27
Corks.....	79,257.96
Glycerin.....	34,034.18
Licorice.....	32,338.57
Mineral water.....	4,436.18
Paper.....	1,175.10
Pepper.....	1,740.85
Skins.....	31,223.96
Tartar.....	45,014.30
Wine.....	19,592.77
Wood.....	51.00
Wool.....	2,184.45
Total.....	282,789.11

Cadiz.

Cork wood.....	58,743.87
Corks.....	16,921.43
Lead.....	4,336.00
Licorice.....	7,215.00
Olives.....	97,955.16
Ores.....	72,721.18
Paintings.....	1,300.00
Pottery.....	626.00
Wine.....	150,913.42
Sundries.....	1,576.00
Total.....	412,333.06

Denia.

Onions.....	201.00
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Madrid.

Furniture (antique).....	492.06
Licorice.....	506.08
Paintings.....	841.65

Skins.....	\$13,753.12
Soap.....	859.05
Total.....	16,451.96

Malaga.

Almonds.....	14,570.76
Canary seed.....	429.80
Chick-pease.....	121.75
Garlic.....	1,295.60
Jen's brandy.....	318.83
Palm-leaf hats.....	20,437.68
Wine.....	1,128.13
Total.....	38,302.55

Total from Spain.

Almonds.....	56,615.05
Bags.....	6,759.27
Canary seed.....	429.80
Capers.....	154.25
Chick-pease.....	121.75
Cork wood.....	58,748.87
Corks.....	96,189.39
Figs.....	4.42
Furniture (antique).....	492.06
Garlic.....	1,295.60
Glycerin.....	34,034.18
Jen's brandy.....	318.83
Lead.....	4,336.00
Licorice.....	40,391.61
Mineral water.....	4,436.18
Olives.....	97,955.16
Olive oil.....	973.80
Onions.....	201.00
Orts.....	72,721.18
Palm-leaf hats.....	20,437.68
Paper.....	1,175.10
Paintings.....	2,161.65
Pepper.....	1,740.85
Pottery.....	626.00
Skins.....	44,982.08
Soap.....	859.05
Tartar.....	43,014.30
Vinegar.....	11.60
Wine.....	171,717.32
Wood.....	51.00
Wool.....	2,684.45
Sundries.....	1,576.00
Total.....	769,215.48

SWEDEN AND NORWAY.

[Report by Consul O'Neil.]

Bergen.

Cod-liver oil.....	35,179.85
Herrings.....	14,588.30
Miscellaneous.....	12,252.43
Skins.....	7,292.50
Wood pulp.....	29,859.90
Total.....	99,172.98
Total for same quarter in 1894.	41,527.25
Increase.....	57,645.73

Christiania.

Matches.....	\$6,359.15
Miscellaneous.....	24,656.94
Wood pulp.....	53,867.20
Total.....	84,885.29
Total for same quarter in 1894..	82,825.55
Increase.....	2,059.74

Gothenberg.

Books.....	6,152.28
Hides.....	30,502.55
Iron:	
Bars.....	48,230.79
Nail rods.....	33,865.47
Wire rods.....	7,315.08
Pig.....	1,191.08
Matches.....	30,784.25
Miscellaneous.....	10,138.94
Steel.....	9,236.15
Wood pulp.....	15,581.09
Total.....	192,997.63
Total for same quarter in 1894..	125,831.63
Increase.....	67,166.05

Helsingborg.

Miscellaneous.....	2,112.80
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Malmö.

Miscellaneous.....	6,116.55
Total for same quarter in 1894..	10,596.62
Decrease.....	4,480.07

Stockholm.

Cement.....	18,214.37
Chlorate of potash.....	5,845.08
Iron.....	131,857.13
Nail rods.....	26,897.02
Wire rods.....	39,084.95
Machinery.....	15,788.49
Miscellaneous.....	3,612.97
Steel.....	76,580.20
Wire rods.....	15,796.16
Total.....	333,676.37
Total for same quarter in 1894..	171,949.96
Increase.....	161,726.41

Total from Sweden and Norway.

Books.....	6,152.28
Cement.....	18,214.37
Chlorate of potash.....	5,845.08
Cod-liver oil.....	35,179.85
Herrings.....	14,588.30
Hides.....	30,502.55
Iron.....	131,857.13
Bars.....	48,230.79
Nail rods.....	60,762.49
Wire rods.....	46,400.03
Pig.....	1,191.08
Machinery.....	15,788.49
Matches.....	37,143.40

Miscellaneous.....	\$56,990.63
Skins.....	7,292.50
Steel.....	85,816.35
Wire rods.....	15,796.16
Wood pulp.....	99,310.19
Total.....	717,061.67
Total for same quarter in 1894..	450,197.67
Increase.....	266,864.00

SWITZERLAND.

[Report by Consul-General Richman.]

Basle.

Absinthe.....	5,196.92
Aniline colors.....	93,989.60
Argols.....	623.06
Asphalt.....	5,092.00
Cheese.....	7,788.61
Chocolate.....	2,233.81
Dyestuffs and chemicals.....	45,852.98
Hides and skins.....	231,664.57
Knit goods (underwear, etc.).....	7,428.89
Ribbons, silk and mixed.....	171,013.27
Silk (spun waste).....	54,593.13
Watches and watch materials.....	214,297.66
Wine and spirits.....	91.64
Miscellaneous.....	359.02
Total.....	840,225.16
Total for same quarter in 1894..	499,982.88
Increase.....	340,242.28

Berne.

Cheese.....	172,297.22
Horn ware.....	3,837.71
Knit goods (underwear, etc.).....	15,133.63
Silk tissues.....	16,472.73
Straw goods.....	2,351.51
Watches and watch materials.....	1,243.45
Wood carvings.....	188.56
Miscellaneous.....	594.35
Total.....	212,119.16
Total for same quarter in 1894..	169,659.36
Increase.....	42,459.80

Geneva.

Aniline colors.....	483.35
Atlases.....	487.91
Chloride of ethyl.....	514.10
Condensed milk, and products of milk..	20,622.24
Furs.....	196.48
Hardware.....	13,443.80
Hellebore.....	341.51
Jewelry.....	137.61
Leather.....	10,356.57
Musical boxes.....	14,480.21
Watches and watch materials.....	32,218.23
Total.....	93,332.01
Total for same quarter in 1894..	99,587.01
Decrease.....	6,255.00

Horgen.

Cheese.....	\$4,662.59
Church articles.....	4,587.16
Condensed milk and products of milk..	13,673.87
Machinery.....	120.62
Ribbons, silk and mixed.....	761.73
Silk and half-silk piece goods.....	183,651.59
Silk, spun.....	11,960.40
Wine and spirits.....	220.60
Miscellaneous.....	2,445.64
Total.....	222,089.20
Total for same quarter in 1894..	248,753.79
Decrease.....	26,664.59

St. Gall.

Church articles.....	1,153.13
Cotton:	
Cloth.....	29,364.95
Embroideries.....	709,885.49
Curtains.....	267,838.73
Dresses, aprons, handkerchiefs, ties, etc.....	216,073.32
Knit goods (underwear, etc.).....	11,736.30
Laces.....	16,197.21
Machinery.....	1,806.09
Silk:	
Bolting cloth.....	25,888.93
Embroideries.....	1,949.04
Miscellaneous.....	319.85
Total.....	1,282,213.04
Total for same quarter in 1894..	632,133.08
Increase.....	650,079.96

Zurich.

Aluminum.....	6,590.30
Beef extract.....	2,918.10
Books.....	131.24
Brushes.....	171.96
Cheese.....	31,311.94
Chromos.....	138.96
Cotton:	
Cloth.....	4,851.81
Embroideries.....	282.93
Yarn.....	364.77
Elastics.....	2,022.25
Gelatin.....	280.14
Hardware.....	568.10
Knit goods (underwear, etc.).....	29,042.91
Photographs.....	343.17
Ribbons, silk and mixed.....	3,739.57
Scientific instruments.....	700.63
Silk:	
Bolting cloth.....	40,525.37
Embroideries.....	195.82
Spun.....	2,029.77
Silk and half-silk piece goods.....	468,833.29
Straw goods.....	57,625.69
Swiss pills.....	643.65
Wine and spirits.....	234.82
Woolen:	
Goods.....	638.94
Yarn.....	20,731.44

Miscellaneous.....	\$140. 42
Total	675,063. 26
Total for same quarter in 1894..	483,676. 80
Increase.....	191,386. 46

Total from Switzerland.

Absinthe	5,196. 92
Aluminum.....	6,590. 39
Aniline colors	94,472. 95
Argols.....	623. 06
Asphalt	5,092. 00
Atlases	487. 91
Beef extract.....	2,918. 16
Books.....	131. 24
Brushes	171. 96
Cheese.....	216,060. 36
Chloride of ethyl.....	514. 10
Chocolate.....	2,233. 81
Chromos	138. 96
Church articles.....	5,740. 29
Condensed milk and products of milk..	34,301. 11
Cotton :	
Cloth.....	34,216. 76
Embroideries.....	710,168. 42
Yarn.....	364. 77
Curtains.....	267,838. 73
Dresses, aprons, handkerchiefs, ties, etc.....	216,073. 32
Dyestuffs and chemicals	45,852. 98
Elastics	2,022. 25
Furs	196. 48
Gelatin.....	280. 14
Hardware.....	14,011. 90
Hides and skins.....	231,664. 57
Hellebore.....	341. 51
Horn ware.....	3,837. 71
Jewelry	137. 61
Knit goods (underwear, etc.).....	63,341. 73
Laces.....	16,197. 21
Leather	10,356. 57
Machinery.....	1,926. 71
Musical boxes.....	14,480. 21
Photographs.....	348. 17
Ribbons, silk and mixed.....	175,514. 59
Scientific instruments.....	700. 63
Silk :	
Bolting cloth.....	66,414. 30
Embroideries.....	2,144. 86
Spun waste.....	54,593. 13
Spun.....	13,990. 17
Tissues.....	16,472. 73
Silk and half-silk piece goods.....	652,484. 98
Straw goods.....	59,977. 20
Swiss pills.....	643. 65
Watches and watch materials.....	247,809. 34
Wine and spirits.....	547. 06
Wood carvings.....	188. 56
Woolen :	
Goods.....	638. 94
Yarn.....	20,731. 44
Miscellaneous.....	3,859. 28
Total	3,325,041. 83
Total for same quarter in 1894..	2,133,793. 11
Increase.....	1,191,248. 72

UNITED KINGDOM.

[Report by Consul-General Collins.]

Belfast.

Beer, ale, stout, etc.....	\$50,585. 23
Cotton manufactures.....	182,861. 88
Hats and felt.....	3,513. 58
Hemp, flax, tow, etc.....	143,775. 02
Linens.....	1,520,525. 68
Machinery.....	389. 32
Rope, string, etc.....	491. 59
Seeds, plants, etc.....	125. 92
Stationery, etc.....	4,217. 86
Thread.....	40,279. 00
Unions.....	78,272. 15
Wines and spirits.....	4,144. 77
Woolens.....	1,019. 29
All other articles.....	4,027. 14
Total.....	2,034,228. 43
Total for same quarter in 1894..	1,496,189. 51
Increase.....	538,038. 92

Birmingham.

Animals.....	214. 12
Buttons.....	7,845. 63
Carpets and rugs.....	15,270. 22
Cotton manufactures.....	2,491. 03
Cutlery.....	80,793. 29
Cycles.....	68,834. 90
Drugs, chemicals, dyes, etc.....	59,883. 72
Glass, china, and earthen ware.....	37,975. 37
Glue and gelatin	3,460. 08
Hardware	67,844. 48
Metals :	
Iron and steel and manufactures..	192,245. 30
Other	15,250. 42
Preserves, pickles, etc.....	9,903. 09
Saddlery.....	84,788. 27
Shells	1,733. 82
Skins, hides, furs, etc.....	38,215. 79
All other articles.....	94,176. 02
Total.....	780,925. 55
Total for same quarter in 1894..	528,996. 67
Increase.....	251,928. 88

Bradford.

Bags and bagging.....	4,835. 47
Card clothing.....	31,250. 45
Carpets and rugs.....	18,312. 50
Cotton.....	18,073. 55
Cotton manufactures.....	284,878. 27
Drugs, chemicals, dyes, etc.....	587. 75
Furniture.....	412. 20
Grease, etc.....	3,331. 15
Hair (cattle, etc.).....	20,766. 72
Leather, etc.....	10,816. 75
Linens.....	250. 00
Machinery.....	75,990. 85
Metals (iron and steel and manufac- tures).....	64,237. 65
Paper and paper hangings.....	1,496. 05
Paper stock.....	6,559. 35
Scientific and other instruments.....	8,877. 60

Shellac.....	\$3,703. 10
Silks.....	26,762. 77
Stuff goods.....	2,227,968. 40
Wool and camel and other hair.....	699,501. 70
Woolens.....	2,516,399. 25
Yarn.....	271,021. 74
All other articles.....	29,540. 28
Total.....	6,325,573. 55
Total for same quarter in 1894..	1,257,016. 75
Increase.....	5,068,556. 80

Bristol.

Books, prints, engravings, etc.....	1,441. 24
Bricks and tiles.....	1,859. 38
Cocoa and chocolate.....	7,450. 72
Drugs, chemicals, dyes, etc.....	18,184. 74
Elastic.....	3,631. 72
Fuller's earth.....	1,757. 79
Glue and gelatin.....	3,011. 93
Leather, etc.....	2,063. 57
Machinery.....	6,118. 12
Metals (other than iron and steel).....	2,973. 42
Ores (iron, etc.).....	3,563. 11
Preserves, pickles, etc.....	1,049. 73
Skins, hides, furs, etc.....	27,806. 09
Tin plates, black plate, etc.....	3,855. 32
Wines and spirits.....	1,438. 65
Woolens.....	22,778. 91
All other articles.....	3,304. 24
Total.....	112,288. 68
Total for same quarter in 1894..	52,899. 49
Increase.....	59,389. 19

Cardiff.

Drugs, chemicals, dyes, etc.....	234. 11
Grease, etc.....	578. 45
Machinery.....	161. 44
Metals (other than iron and steel).....	432. 87
Rope, string, etc.....	2,645. 10
Tin plates, black plate, etc.....	55,556. 97
All other articles.....	12. 65
Total.....	59,621. 59
Total for same quarter in 1894..	196,709. 22
Decrease.....	137,087. 63

Cork.

Drugs, chemicals, dyes, etc.....	204. 65
Feathers.....	680. 81
Skins, hides, furs, etc.....	23,194. 97
Wines and spirits.....	399. 92
Works of art.....	97. 33
Total.....	24,577. 68
Total for same quarter in 1894..	29,119. 64
Decrease.....	4,541. 96

Dublin.

Beer, ale, stout, etc.....	157,385. 60
Books, prints, engravings, etc.....	192. 73
Feathers.....	1,104. 12
Gloves, hosiery, etc.....	693. 80

Glue and gelatin.....	\$919. 77
Provisions (cheese, bacon, etc.).....	310. 47
Sausage casings.....	1,352. 88
Skins, hides, furs, etc.....	40,111. 78
Wines and spirits.....	10,587. 33
Woolens.....	17,676. 76
All other articles.....	4,759. 14
Total.....	235,093. 06
Total for same quarter in 1894..	130,118. 13
Increase.....	104,975. 56

Dundee.

Bags and bagging.....	5,778. 85
Burlaps.....	1,162,301. 90
Carpets and rugs.....	18,733. 02
Cotton manufactures.....	8,804. 29
Fish.....	1,957. 50
Fruits, nuts, and vegetables.....	19,284. 48
Glass, china, and earthen ware.....	5,148. 88
Hemp, flax, tow, etc.....	19,308. 96
Jute.....	3,367. 20
Leather, etc.....	5,933. 79
Linens.....	547,949. 82
Machinery.....	626. 26
Paper and paper hangings.....	8,472. 52
Paper stock.....	15,013. 07
Preserves, pickles, etc.....	2,107. 32
Rubber clothing and manufactures.....	2,705. 67
Scientific and other instruments.....	458. 40
Skins, hides, furs, etc.....	336. 00
Stone (marble, granite, etc.).....	87,514. 94
Wines and spirits.....	2,305. 22
Wool and camel and other hair.....	13,164. 78
Woolens.....	11,102. 53
Yarn.....	24,889. 67
All other articles.....	71,658. 21
Total.....	2,038,823. 28
Total for same quarter in 1894..	1,773,389. 33
Increase.....	265,433. 95

Dunfermline.

Cotton manufactures.....	23,162. 80
Floor cloth.....	16,263. 88
Linens.....	288,669. 54
Wines and spirits.....	539. 70
Yarn.....	4,581. 63
Total.....	333,217. 55
Total for same quarter in 1894..	272,019. 57
Increase.....	61,197. 98

Falmouth.

China clay, etc.....	59,933. 86
Total for same quarter in 1894..	69,811. 33
Decrease.....	9,877. 47

Glasgow.

Animals.....	435. 00
Beer, ale, stout, etc.....	1,253. 50
Books, prints, engravings, etc.....	18,222. 06
Carpets and rugs.....	20,924. 14
China, clay, etc.....	8,687. 98

Coal and coke.....	\$5,155.76
Colors, paints, and varnishes.....	9,266.94
Cotton.....	26,628.84
Cotton manufactures.....	150,955.94
Drugs, chemicals, dyes, etc.....	154,284.58
Fish.....	12,737.46
Fruits, nuts, and vegetables.....	10,190.14
Glass, china, and earthen ware.....	1,825.76
Hats and felt.....	2,591.56
Hemp, flax, tow, etc.....	79,065.74
Jute.....	1,433.00
Lace.....	66,079.76
Linens.....	6,532.35
Machinery.....	16,230.52
Metals (iron and steel and manufactures).....	8,039.86
Paper and paper hangings.....	5,969.16
Paper stock.....	15,157.70
Pitch and tar.....	8,575.24
Provisions (cheese, bacon, etc.).....	59,400.10
Silks.....	5,377.60
Skins, hides, furs, etc.....	57,528.52
Stone (marble, granite, etc.).....	2,593.81
Thread.....	58,057.10
Unions.....	58,142.28
Wines and spirits.....	7,423.20
Wool and camel and other hair.....	64,197.44
Woolens.....	30,232.12
All other articles.....	33,391.32
Total.....	1,006,586.50
Total for same quarter in 1894..	703,674.37
Increase.....	302,912.13

Huddersfield.

Card clothing.....	8,989.26
Carpets and rugs.....	1,372.66
Clocks and watches.....	738.49
Cotton manufactures.....	34,991.28
Drugs, chemicals, dyes, etc.....	38,167.88
Fuller's earth.....	5,367.91
Grease, etc.....	497.60
Linens.....	1,835.95
Machinery.....	3,698.89
Metals (other than iron and steel).....	1,316.08
Paper stock.....	12,737.42
Rubber clothing and manufactures.....	6.80
Silks.....	9,826.48
Soaps.....	810.51
Stationery, etc.....	274.95
Stuff goods.....	6,711.78
Wool and camel and other hair.....	68,486.72
Woolens.....	897,372.94
Yarn.....	3,070.33
Total.....	1,123,273.93
Total for same quarter in 1894..	362,189.98
Increase.....	761,083.95

Hull.

Bags and bagging.....	684.35
Coal and coke.....	1,652.80
Colors, paints, and varnishes.....	8,818.08
Confectionery.....	108.27

Drugs, chemicals, dyes, etc.....	\$13,592.01
Fruits, nuts, and vegetables.....	3,698.73
Glass, china, and earthen ware.....	55.25
Hemp, flax, tow, etc.....	257.92
Leather, etc.....	3,887.15
Machinery.....	858.44
Oils.....	3,889.16
Pitch and tar.....	1,143.98
Rope, string, etc.....	527.16
Skins, hides, furs, etc.....	41,796.65
Stone (marble, granite, etc.).....	1,122.33
Wool and camel and other hair.....	468.93
Total.....	82,561.21
Total for same quarter in 1894..	55,844.53
Increase.....	26,716.68

Leeds.

Bricks and tiles.....	16,197.88
Cocoa and chocolate.....	2,964.07
Drugs, chemicals, dyes, etc.....	10,462.96
Leather, etc.....	7,615.40
Linens.....	542.35
Machinery.....	78,793.64
Skins, hides, furs, etc.....	17,867.72
Wool and camel and other hair.....	55,771.02
Woolens.....	515,098.90
Yarn.....	11,246.48
All other articles.....	3,077.54
Total.....	719,637.96
Total for same quarter in 1894..	140,630.26
Increase.....	579,007.70

Leith.

Bags and bagging.....	115.37
Beer, ale, stout, etc.....	8,075.95
Books, prints, engravings, etc.....	6,368.72
Carpets and rugs.....	720.58
Cycles.....	160.00
Drugs, chemicals, dyes, etc.....	504.63
Fish.....	3,225.69
Glass, china, and earthen ware.....	90.76
Glue and gelatin.....	59,504.05
Grease, etc.....	5,518.09
Metals (other than iron and steel).....	6,564.23
Paper and paper hangings.....	683.92
Provisions (cheese, bacon, etc.).....	6,375.43
Rope, string, etc.....	1,959.91
Scientific and other instruments.....	71.82
Stationery, etc.....	1,098.22
Stone, (marble, granite, etc.).....	497.47
Wines and spirits.....	20,757.60
Woods.....	978.77
Wool and camel and other hair.....	239.10
Woolens.....	63,335.39
Works of art.....	7,755.79
All other articles.....	12,098.41
Total.....	206,699.90
Total for same quarter in 1894..	127,122.15
Increase.....	79,577.75

Liverpool.

Animals.....	\$28,941.07
Bags and bagging.....	171,082.70
Beer, ale, stout, etc.....	34,946.32
Books, prints, engravings, etc.....	1,079.99
Bricks and tiles.....	11,149.14
Cement.....	88,000.91
China clay, etc.....	13,013.00
Coal and coke.....	55,979.33
Colors, paints, and varnishes.....	13,671.32
Cotton.....	175,183.79
Cotton manufactures.....	44,188.30
Drugs, chemicals, dyes, etc.....	1,405,787.62
Fish.....	16,692.08
Floor cloth.....	28,021.29
Fruits, nuts, and vegetables.....	75,197.80
Furniture.....	4,292.23
Glass, china, and earthen ware.....	60,175.87
Glue and gelatin.....	1,931.99
Hardware.....	12,740.49
Hats and felt.....	4,151.11
Hemp, flax, tow, etc.....	84,526.22
Machinery.....	1,557.27
Metals:	
Iron and steel and manufactures...	210,671.35
Other	6,039.32
Oils	256,892.79
Paper stock.....	115,253.30
Pitch and tar.....	22,921.21
Preserves, pickles, etc.....	6,384.84
Rice.....	34,065.49
Rubber, raw.....	672,220.95
Saddlery	5,557.53
Salt.....	124,421.79
Seeds, plants, etc.....	16,541.22
Skins, hides, furs, etc.....	662,744.55
Spices, etc.....	57,911.33
Stone (marble, granite, etc.).....	1,148.49
Sugar.....	41,885.95
Tea.....	15,305.13
Tin	34,046.02
Tin plates, black plate, etc.....	1,376,493.83
Tobacco and cigarettes.....	29.19
Wines and spirits.....	3,416.27
Woods.....	29,479.65
Wool and camel and other hair.....	713,862.01
All other articles.....	45,388.01
Total.....	6,784,990.06
Total for same quarter in 1894..	4,992,118.65
Increase.....	1,792,871.41

London.

Animals.....	3,398.72
Antimony	15,918.05
Artificial flowers.....	2,963.57
Beer, ale, stout, etc.....	120,220.45
Blacking.....	5,666.46
Books, prints, engravings, etc.....	353,761.98
Bristles.....	58,200.33
Brushes.....	10,931.00
Burlaps.....	37,122.21
Buttons.....	444.77
Carpets and rugs..	44,766.90
Cement.....	241,864.84

Chalk.....	\$22,347.47
China clay, etc.....	1,942.64
Clocks and watches.....	15,496.67
Coal and coke.....	13,541.86
Cocoa and chocolate.....	171,645.00
Coffee.....	60,302.26
Colors, paints, and varnishes.....	100,327.17
Confectionery.....	5,058.70
Cotton manufactures.....	37,248.68
Cycles	342.60
Drugs, chemicals, dyes, etc.....	341,551.29
Elastic	148.67
Emery and polishing powders.....	3,820.79
Feathers	328,875.12
Fish.....	7,735.67
Floor cloth.....	42,820.95
Fruits, nuts, and vegetables.....	36,082.03
Fuller's earth.	8,597.82
Furniture.....	22,700.19
Glass, china, and earthen ware.....	32,187.52
Gloves, hosiery, etc.....	25,051.21
Glue and gelatin.....	23,864.92
Grease, etc.....	72,232.18
Gum.....	79,315.42
Hair (cattle, etc.).....	85,536.92
Hardware	1,771.72
Hats and felt.....	8,730.45
Hemp, flax, tow, etc.....	110,994.78
Indigo	26,767.88
Ivory	8,578.40
Jute.....	38,829.27
Lace.....	725.79
Leather, etc.....	608,649.92
Linens	42,039.92
Linseed	317,784.29
Machinery.....	21,689.65
Matches.....	1,777.55
Metals:	
Iron and steel and manufactures..	48,485.77
Other	108,820.82
Mustard.....	57,020.35
Oils	101,105.01
Paper and paper hangings.....	52,218.88
Paper stock.....	114,248.02
Perfumery.....	8,442.48
Pitch and tar.....	62,018.86
Precious stones.....	645,240.90
Preserves, pickles, etc.....	88,345.65
Provisions (cheese, bacon, etc.).....	3,607.22
Quicksilver.....	7,007.76
Rice.....	16,899.86
Rope, string, etc.....	11,800.78
Rubber:	
Raw.....	74,819.66
Clothing and manufactures.....	69,280.71
Saddlery.....	17,296.01
Salt	2,025.68
Sausage casings.....	3,285.62
Scientific and other instruments.....	22,732.05
Seeds, plants, etc.....	215,896.86
Shellac.....	104,652.91
Shells.....	140,007.99
Silks	55,868.41
Soaps.....	50,144.83
Skins, hides, furs, etc.....	2,350,568.19
Spices, etc.....	87,286.27

Sponges.....	\$19,834.82
Stationery, etc.....	24,187.03
Sticks and canes.....	5,543.45
Straw plait and braids.....	113,372.27
Straw manufactures (other).....	15,046.43
Stone (marble, granite, etc.).....	5,353.56
Sugar.....	4,119.07
Tea.....	191,387.31
Tin.....	852,234.23
Tin plates, black plate, etc.....	15,535.13
Tobacco and cigarettes.....	19,438.02
Wearing apparel, etc.....	34,518.26
Wines and spirits.....	75,129.15
Woods.....	41,395.50
Wool and camel and other hair.....	2,477,161.61
Woolens.....	346,105.64
Works of art.....	151,402.37
Yarn.....	1,664.79
All other articles.....	269,118.26
Total.....	12,834,044.10
Total for same quarter in 1894..	8,153,707.98
Increase.....	4,680,336.12

Manchester.

Buttons.....	666.04
Card clothing.....	17,287.33
Carpets and rugs.....	31,879.36
Cotton.....	21,590.72
Cotton manufactures.....	1,311,237.12
Drugs, chemicals, dyes, etc.....	217,876.13
Gloves, hosiery, etc.....	36,070.60
Hair (cattle, etc.).....	5,683.26
Hats and felt.....	7,477.49
Lace.....	174,144.86
Leather, etc.....	38,791.36
Linens.....	469,724.90
Machinery.....	294,971.00
Metals (iron and steel and manufactures).....	50,594.75
Paper and paper hangings.....	53,900.66
Paper stock.....	97,831.78
Rubber clothing and manufactures....	32,446.72
Silks.....	182,332.43
Wool and camel and other hair.....	5,308.34
Woolens.....	33,648.68
Yarn.....	18,346.67
All other articles.....	33,196.88
Total.....	3,135,007.08
Total for same quarter in 1894..	1,626,795.23
Increase.....	1,508,211.85

Newcastle.

Antimony.....	37,019.47
Books, prints, engravings, etc.....	228.73
Bricks and tiles.....	3,674.21
Carpets and rugs.....	140.37
Cement.....	1,056.03
Coal and coke.....	23,216.98
Colors, paints, and varnishes.....	2,340.79
Cotton manufactures.....	18,321.86
Drugs, chemicals, dyes, etc.....	76,435.10
Linens.....	6,559.17

Machinery.....	\$2,356.11
Metals (iron and steel and manufactures).....	11,235.22
Rope, string, etc.....	4,078.13
Skins, hides, furs, etc.....	34,756.54
Stone (marble, granite, etc.).....	11,703.93
Woolens.....	11,360.82
All other articles.....	11,223.58
Total.....	255,707.04
Total for same quarter in 1894..	234,142.96
Increase.....	21,564.08

Nottingham.

Colors, paints, and varnishes.....	15,968.27
Cotton.....	10,523.98
Cotton manufactures.....	41,089.29
Cycles.....	734.89
Drugs, chemicals, dyes, etc.....	154,148.25
Elastic.....	56,206.74
Glass, china, and earthen ware.....	667.63
Gloves, hosiery, etc.....	148,824.37
Grease, etc.....	1,210.09
Lace.....	376,201.16
Leather, etc.....	9,223.08
Linens.....	31,606.76
Machinery.....	52,179.99
Metals (other than iron and steel).....	2,423.38
Silks.....	27,801.79
Woolens.....	12,607.96
All other articles.....	12,319.26
Total.....	953,736.89
Total for same quarter in 1894..	1,121,441.27
Decrease.....	167,704.38

Plymouth.

Brushes.....	110.95
China clay, etc.....	65,886.65
Drugs, chemicals, dyes, etc.....	9,999.18
Seeds, plants, etc.....	31.75
Stone (marble, granite, etc.).....	200.74
Wearing apparel, etc.....	98.95
Wines and spirits.....	2,988.35
Total.....	79,316.57
Total for same quarter in 1894..	30,619.58
Increase.....	48,696.99

Sheffield.

Animals.....	311.46
Beer, ale, stout, etc.....	1,709.84
Cutlery.....	159,829.84
Drugs, chemicals, dyes, etc.....	5,688.44
Glue and gelatin.....	19,241.47
Hair (cattle, etc.).....	1,082.71
Hardware.....	5,592.71
Ivory.....	9,724.15
Lace.....	88.25
Leather, etc.....	1,981.06
Linens.....	8,301.56
Machinery.....	2,755.30
Metals (iron and steel manufactures)..	366,277.23

Oils.....	\$866. 17
Scientific and other instruments.....	9,450. 32
Wines and spirits.....	128. 14
Horn and manufactures of.....	8,268. 17
All other articles.. ..	2,536. 19
Total.....	603,833. 01
Total for same quarter in 1894..	356,791. 54
Increase.....	247,041. 47

Southampton.

Animals.....	6. 80
Furniture.....	260. 00
Metals (other than iron and steel).....	170. 00
Provisions (cheese, bacon, etc.).....	4,615. 15
Seeds, plants, etc.....	117. 52
Skins, hides, furs, etc.....	7,645. 00
Stationery, etc.....	611. 45
Wearing apparel, etc.....	1,309. 22
Wines and spirits.....	1,216. 62
Yachts' fittings and boats, etc.....	6,083. 12
All other articles.....	3,041. 56
Total	25,076. 44
Total for same quarter in 1894..	24,875. 63
Increase.....	200. 81

Swansea.

Bricks and tiles.....	5,390. 16
Coal and coke.....	101,096. 52
Drugs, chemicals, dyes, etc.....	40,853. 57
Grease, etc.....	524. 28
Oils.....	1,987. 27
Tin plates, black plate, etc.....	1,170,660. 41
All other articles.....	1,201. 75
Total.....	1,271,713. 96
Total for same quarter in 1894..	1,887,293. 66
Decrease.....	615,579. 90

Tunstall.

Bricks and tiles.....	184. 68
China clay, etc.....	6,174. 88
Colors, paints, and varnishes.....	1,569. 40
Elastic.....	43. 80
Glass, china, and earthen ware.....	1,180,888. 51
Gloves, hosiery, etc.....	31. 63
Hardware.....	2,334. 46
Jute.....	476. 92
Leather, etc.....	1,047. 52
Paper and paper hangings.....	1,865. 92
All other articles.....	3,024. 42
Total	1,197,642. 14
Total for same quarter in 1894..	709,147. 39
Increase.....	488,494. 75

Total from the United Kingdom.

Animals.....	33,304. 17
Antimony	52,937. 52
Artificial flowers.....	2,963. 57
Bags and bagging.....	182,496. 74

Beer, ale, stout, etc.....	\$374,176. 89
Blacking	5,666. 46
Books, prints, engravings, etc.....	381,295. 47
Bricks and tiles.....	38,455. 45
Bristles.....	58,200. 33
Brushes	11,041. 95
Burlaps	1,199,424. 11
Buttons	8,956. 44
Card clothing.....	57,527. 04
Carpets and rugs.....	152,119. 75
Cement	330,321. 75
Chalk.....	22,347. 47
China clay, etc.....	155,639. 01
Clocks and watches.....	16,235. 15
Coal and coke.....	200,643. 25
Cocoa and chocolate.....	182,059. 79
Coffee.....	60,302. 26
Colors, paints, and varnishes.....	151,961. 97
Confectionery.....	5,166. 97
Cotton	252,000. 88
Cotton manufactures.....	2,140,230. 74
Cutlery.....	240,623. 13
Cycles.....	70,072. 39
Drugs, chemicals, dyes, etc.....	2,548,446. 61
Elastic.....	60,030. 93
Emery and polishing powders.....	3,820. 79
Feathers.....	330,660. 05
Fish.....	42,343. 40
Floor cloth.....	87,106. 12
Fruits, nuts, and vegetables.....	144,453. 18
Fuller's earth.....	15,723. 52
Furniture.....	27,664. 62
Glass, china, and earthen ware.....	1,319,015. 55
Gloves, hosiery, etc.....	210,670. 84
Glue and gelatin.....	111,934. 21
Grease, etc.....	83,891. 84
Guins	79,315. 42
Hair (cattle, etc.).....	113,069. 61
Hardware	90,283. 86
Hats and felt.....	26,464. 19
Hemp, flax, tow, etc.....	437,928. 64
Indigo.....	26,767. 88
Ivory	48,302. 55
Jute.....	44,106. 39
Lace.....	617,239. 82
Leather, etc.....	690,009. 60
Linens.....	2,924,438. 00
Linseed	317,784. 29
Machinery.....	558,376. 80
Matches.....	1,777. 55
Metals :	
Iron and steel and manufactures...	951,787. 13
Other	143,990. 54
Mustard.....	57,020. 35
Oils.....	364,740. 40
Ores (iron, etc.).....	3,563. 11
Paper and paper hangings.....	124,607. 11
Paper stock.....	376,800. 64
Perfumery.....	8,442. 48
Pitch and tar.....	94,659. 29
Precious stones.....	645,240. 90
Preserves, pickles, etc.....	107,790. 63
Provisions (cheese, bacon, etc.).....	74,308. 37
Quicksilver.....	7,007. 70
Rice.....	50,965. 35
Rope, string, etc.....	21,502. 67

Rubber :

Raw	\$747,040.61
Clothing and manufactures.....	104,439.90
Saddlery.....	107,641.81
Salt.....	126,447.47
Sausage casings.....	4,638.50
Scientific and other instruments.....	41,590.19
Seeds, plants, etc.....	232,713.27
Shellac.....	108,356.01
Shells.....	141,741.81
Silks.....	307,969.48
Soaps.....	50,955.34
Skins, hides, furs, etc.....	3,302,571.80
Spices, etc.....	145,197.60
Sponges.....	19,834.82
Stationery, etc.....	30,389.51
Sticks and canes.....	5,543.45
Straw plait and braids.....	113,372.27
Straw manufactures (other).....	15,046.43
Stuff goods.....	2,234,680.18
Stone (marble, granite, etc.).....	110,135.27
Sugar.....	46,005.02
Tea.....	206,692.44
Thread.....	98,336.10
Tin.....	886,280.25
Tin plates, black plate, etc.....	2,572,101.66
Tobacco and cigarettes.....	19,467.21
Unions.....	136,414.43
Wearing apparel, e.c.....	35,926.43
Wines and spirits.....	130,474.92
Woods.....	71,853.92
Wool and camel and other hair.....	4,098,161.65
Woolens.....	4,478,739.19
Works of art.....	159,255.49
Yarn.....	361,821.31
Horn and manufactures of.....	8,268.17
Yachts' fittings and boats, etc.....	6,083.12
All other articles.....	637,094.86
Total	42,284,110.62
Total for same quarter in 1894..	26,332,664.79
Increase.....	15,951,445.83

QUARTER ENDING MARCH 31, 1895.*

Belfast.

Animals.....	17.76
Beer, ale, stout, etc.....	20,822.98
Cotton manufactures.....	278,965.32
Hats and felt.....	1,820.66
Hemp, flax, tow, etc.....	179,263.30
Linens.....	2,200,635.68
Machinery.....	1,313.95
Seeds, plants, etc.....	1,077.11
Stationery, etc.....	3,722.17
Thread.....	94,344.37
Unions.....	125,280.60
Wines and spirits.....	3,749.67
Woolens.....	1,014.12
All other articles.....	5,591.50
Total.....	2,917,619.19
Total for same quarter in 1894..	1,594,084.71
Increase.....	1,323,534.48

Birmingham.

Bricks and tiles.....	\$10,995.93
Buttons.....	13,029.54
Carpets and rugs.....	13,688.34
Cotton manufactures.....	5,919.49
Cycles.....	49,714.53
Drugs, chemicals, dyes, etc.....	57,906.70
Glass, china, and earthen ware.....	33,453.34
Glue and gelatin.....	1,030.72
Hardware.....	263,130.76
Metals :	
Iron and steel and manufactures..	114,086.48
Other	17,054.48
Preserves, pickles, etc.....	4,126.28
Saddlery.....	73,893.13
Shells.....	1,524.86
Skins, hides, furs, etc.....	48,363.30
Unions.....	8,307.23
All other articles.....	13,493.08
Total.....	729,718.19
Total for same quarter in 1894..	487,390.46
Increase.....	242,327.73

Bradford.

Bags and bagging.....	5,442.60
Buttons.....	96.35
Card clothing.....	34,060.60
Carpets and rugs.....	69,358.80
Cotton.....	4,786.75
Manufactures.....	377,303.40
Drugs, chemicals, dyes, etc.....	1,811.00
Hair (cattle, etc.).....	3,680.70
Leather, etc.....	9,781.10
Machinery.....	111,486.00
Metals (iron and steel and manufactures).....	45,222.65
Paper and paper hangings.....	1,558.30
Paper stock.....	7,361.00
Rubber (clothing and manufactures)...	206.80
Scientific and other instruments.....	1,970.95
Silks.....	42,327.70
Skins, hides, furs, etc.....	115.60
Stuff goods.....	2,390,086.45
Wearing apparel, etc.....	4,046.40
Wines and spirits.....	791.55
Wool and camel and other hair.....	720,004.40
Woolens.....	2,627,211.20
Yarn.....	303,234.20
All other articles.....	1,266.20
Total.....	6,763,210.70
Total for same quarter in 1894..	1,275,036.28
Increase.....	5,488,174.42

Bristol.

Books, prints, engravings, etc.....	3,742.43
Cocoa and chocolate	5,449.86
Cycles.....	4,912.79
Drugs, chemicals, dyes, etc.....	17,829.52
Elastic.....	2,659.47
Fuller's earth.....	2,526.65
Glue and gelatin.....	4,061.26
Hemp, flax, tow, etc	1,115.57

* Delayed in transmission.

Linseed	\$24,021.88
Metals (other than iron and steel).....	1,134.98
Ores (iron, etc.).....	5,148.06
Preserves, pickles, etc.....	1,035.60
Soaps	1,283.93
Skins, hides, furs, etc.....	11,296.92
Tin plates, black plate, etc.....	8,275.01
Wines and spirits.....	1,705.70
Woolens.....	36,529.55
All other articles.....	2,869.72
Total.....	135,598.90
Total for same quarter in 1894..	61,743.50
Increase.....	73,855.40

Cardiff.

Cement.....	573.03
Grease, etc.....	133.33
Metals (iron and steel and manufactures)	399.13
Rope, string, etc.....	1,457.54
Tin	7,842.40
Plates, black plate, etc.....	175,125.66
All other articles.....	92.34
Total.....	185,623.43
Total for same quarter in 1894..	87,688.28
Increase.....	97,935.15

Cork.

Feathers	1,927.73
Fish.....	7,276.54
Skins, hides, furs, etc.....	15,549.28
Stone (marble, granite, etc.).....	270.04
Wines and spirits.....	550.30
Total.....	25,573.89
Total for same quarter in 1894..	31,661.24
Decrease.....	6,087.35

Dublin.

Animals.....	97.33
Beer, ale, stout, etc.....	165,763.08
Gloves, hosiery, etc.	538.57
Provisions (cheese, bacon, etc.).....	140.55
Sausage casings.....	802.97
Skins, hides, furs, etc.....	36,565.52
Wines and spirits.....	9,152.52
Wool and camel and other hair.....	7,434.19
Woolens.....	13,666.87
Flour, oatmeal, and manufactures of...	4,742.06
All other articles.....	613.32
Total.....	239,516.98
Total for same quarter in 1894..	232,497.37
Increase.....	7,019.61

Dundee.

Bags and bagging.....	7,351.05
Blacking.....	186.60
Burlaps	968,331.04
Carpets and rugs.....	20,792.69
Cotton manufactures.....	28,708.80
Fish.....	3,058.02
Fruits, nuts, and vegetables.....	56,655.65

Glass, china, and earthen ware.....	\$3,497.88
Hemp, flax, tow, etc	18,726.62
Jute.....	26,377.36
Leather, etc.....	18,773.79
Linens	650,588.02
Ores, iron, etc.	756.00
Paper and paper hangings.....	11,267.00
Paper stock.....	12,597.22
Preserves, pickles, etc.....	2,107.32
Rubber (clothing and manufactures)...	124.08
Stone (marble, granite, etc.).....	63,535.16
Wines and spirits.....	3,760.81
Wool and camel and other hair.....	14,130.93
Woolens.....	8,037.33
Yarn.....	31,476.12
Horn, bone, gut, and manufactures of..	13,345.24
All other articles.....	74,132.64
Total.....	2,038,317.37
Total for same quarter in 1894..	1,634,649.50
Increase.....	403,667.87

Dunfermline.

Cotton manufactures.....	22,188.70
Floor cloth.....	50,829.05
Linens.....	446,848.70
Wines and spirits.	477.65
Yarn.....	930.07
All other articles.....	180.58
Total.....	521,454.73
Total for same quarter in 1894..	339,621.87
Increase.....	181,832.86

Falmouth.

China clay, etc.....	60,269.02
Fish.....	312.30
Wearing apparel, etc.....	193.68
Works of art.....	973.30
Total.....	61,748.30
Total for same quarter in 1894..	53,991.42
Increase.....	7,756.88

Glasgow.

Beer, ale, stout, etc.....	1,887.30
Books, prints, engravings, etc.....	18,210.72
Carpets and rugs.....	57,371.20
Coal and coke	5,944.58
Cotton.....	62,562.30
Manufactures.....	577,973.37
Drugs, chemicals, dyes, etc.....	117,263.23
Fish.....	32,605.95
Fruits, nuts, and vegetables.....	36,543.86
Glass, china, and earthen ware.....	7,249.42
Gums	6,275.83
Hats and felt.....	788.90
Hemp, flax, tow, etc.....	53,412.20
Lace.....	46,650.82
Linens.....	22,796.50
Machinery.....	18,459.03
Metals (iron and steel and manufactures).....	13,221.06
Paper and paper hangings.....	5,416.00

Paper stock.....	\$10,705.90
Pitch and tar.....	10,320.04
Provisions (cheese, bacon, etc.).....	44,505.93
Silks.....	37,097.18
Skins, hides, furs, etc.....	22,527.50
Stone (marble, granite, etc.).....	1,045.18
Thread.....	49,915.50
Unions.....	113,790.50
Wearing apparel, etc.....	314.38
Wines and spirits.....	9,021.96
Wool and camel and other hair.....	68,417.00
Woolens.....	31,326.10
Horn, bone, gut, and manufactures of..	12,015.00
All other articles.....	16,338.84
Total.....	1,511,973.28
Total for same quarter in 1894..	953,155.97
Increase.....	558,817.31

Huddersfield.

Card clothing.....	24,942.15
Carpets and rugs.....	3,908.02
Cotton manufactures.....	13,512.92
Drugs, chemicals, dyes, etc.....	39,782.65
Fuller's earth.....	3,896.62
Grease, etc.....	1,010.08
Jute.....	1,098.17
Linens.....	6,128.63
Machinery.....	6,266.15
Metals (iron and steel and manufactures).....	160.26
Silks.....	11,628.95
Stationery, etc.....	222.17
Stuff goods.....	1,585.64
Thread.....	36,232.74
Unions.....	33,236.54
Wool and camel and other hair.....	25,442.11
Woolens.....	1,010,791.73
Yarn.....	30,050.34
All other articles.....	117.79
Total.....	1,250,013.64
Total for same quarter in 1894..	542,786.07
Increase.....	707,227.57

Hull.

Animals.....	2,676.58
Colors, paints, and varnishes.....	5,443.69
Drugs, chemicals, dyes, etc.....	41,699.43
Fish.....	1,222.94
Fruits, nuts, and vegetables.....	18,300.20
Hair (cattle, etc.).....	971.42
Hemp, flax, tow, etc.....	1,594.07
Machinery.....	153.90
Oils.....	3,956.51
Pitch and tar.....	184.23
Seeds, plants, etc.....	208.38
Stone (marble, granite, etc.).....	319.48
Wool and camel and other hair.....	541.17
All other articles.....	98.70
Total.....	77,370.70
Total for same quarter in 1894..	40,983.09
Increase.....	36,387.61

Leeds.

Cocoa and chocolate.....	\$1,006.88
Drugs, chemicals, dyes, etc.....	13,074.22
Glass, china, and earthen ware.....	19,343.93
Leather, etc.....	5,234.63
Linens.....	2,113.83
Metals (iron and steel and manufactures).....	29,499.24
Skins, hides, furs, etc.....	27,364.55
Wool and camel and other hair.....	32,347.34
Woolens.....	585,799.18
Yarn.....	9,845.17
All other articles.....	2,727.15
Total.....	728,356.12
Total for same quarter in 1894..	139,382.22
Increase.....	588,973.90

Leith.

Animals.....	48.66
Beer, ale, stout, etc.....	5,548.96
Books, prints, engravings, etc.....	10,852.72
Carpets and rugs.....	2,679.82
Drugs, chemicals, dyes, etc.....	3,754.63
Fish.....	5,204.96
Fruits, nuts, and vegetables.....	346.47
Glass, china, and earthen ware.....	486.09
Glue and gelatin.....	61,779.75
Grease, etc.....	4,026.33
Metals:	
Iron and steel and manufactures...	3,237.88
Other.....	74.58
Paper stock.....	1,530.12
Provisions (cheese, bacon, etc.).....	1,462.52
Rope, string, etc.....	2,111.79
Rubber (clothing and manufactures)...	247.41
Saddlery.....	202.32
Seeds, plants, etc.....	125.43
Stationery, etc.....	940.07
Stone (marble, granite, etc.).....	214.23
Wearing apparel, etc.....	263.58
Wines and spirits.....	18,670.75
Wool, camel, and other hair.....	10,629.48
Woolens.....	97,131.51
Works of art.....	15,336.77
Flour, oatmeal, and manufactures of...	523.39
Vulcanite (celluloid and manufactures).....	3,437.27
All other articles.....	3,007.65
Total.....	253,875.14
Total for same quarter in 1894..	150,508.83
Increase.....	103,366.31

Liverpool.

Animals.....	14,224.68
Bags and bagging.....	99,053.09
Beer, ale, stout, etc.....	32,741.80
Books, prints, engravings, etc.....	1,510.71
Bricks and tiles.....	2,369.96
Cement.....	21,042.74
China clay, etc.....	7,791.25
Coal and coke.....	80,701.16
Colors, paints, and varnishes.....	10,093.39

Cotton.....	\$510,753.84
Manufactures.....	36,542.54
Drugs, chemicals, dyes, etc.....	1,527,489.27
Fish.....	102,846.23
Floor cloth.....	39,209.38
Fruits, nuts, and vegetables.....	249,305.92
Furniture.....	2,486.76
Glass, china, and earthen ware.....	61,785.40
Glue and gelatin.....	579.10
Grease, etc.,.....	136,442.04
Hardware.....	10,623.56
Hats and felt.....	3,713.13
Hemp, flax, tow, etc.....	66,617.50
Machinery.....	4,584.23
Metals:	
Iron and steel and manufactures..	94,433.89
Other	20,297.65
Paper stock.....	60,067.19
Pitch and tar.....	14,034.97
Preserves, pickles, etc.....	457.44
Provisions (cheese, bacon, etc.).....	253.05
Rice.....	24,313.01
Rubber (raw).....	395,682.95
Saddlery.....	2,744.70
Salt.....	129,666.05
Seeds, plants, etc.....	25,062.44
Skins, hides, furs, etc.....	212,534.65
Spices, etc.....	22,475.76
Stone (marble, granite, etc.).....	1,411.27
Sugar.....	61,473.62
Tea.....	16,200.56
Tin.....	24,853.20
Tin plates, black plate, etc.....	1,928,699.79
Tobacco and cigarettes.....	364.97
Wines and spirits.....	5,299.60
Woods.....	45,929.51
Wool and camel and other hair.....	691,446.91
Woolens.....	18,064.43
Manure	21,159.53
All other articles.....	26,955.86
Total.....	6,866,390.68
Total for same quarter in 1894..	4,839,051.06
Increase.....	2,027,339.62

London.

Animals.....	4,903.98
Antimony	27,514.12
Artificial flowers.....	42,323.97
Beer, ale, stout, etc.....	177,915.45
Blacking.....	6,773.61
Books, prints, engravings, etc.....	321,721.11
Bristles	59,754.88
Brushes	19,407.10
Burlaps.....	32,740.13
Carpets and rugs.....	70,760.25
Cement.....	129,338.49
Chalk	6,360.37
China clay, etc.....	1,204.40
Clocks and watches.....	6,862.01
Cocoa and chocolate	62,690.78
Coffee.....	112,719.11
Colors, paints, and varnishes.....	85,122.14
Cotton manufactures.....	106,822.85

Drugs, chemicals, dyes, etc.....	\$488,297.07
Elastic.....	2,160.36
Emery and polishing powders	4,916.92
Feathers.....	188,359.69
Fish.....	13,774.35
Floor cloth.....	56,233.02
Fruits, nuts, and vegetables.....	113,856.07
Fuller's earth.....	17,324.32
Furniture.....	21,333.44
Glass, china, and earthen ware.....	22,354.47
Gloves, hosiery, etc.....	93,545.75
Glue and gelatin.....	10,581.49
Grease, etc.....	66,459.96
Gums	94,940.78
Hair, cattle, etc.....	71,281.43
Hardware	3,062.98
Hats and felt.....	38,000.61
Hemp, flax, tow, etc.....	77,218.48
Indigo.....	81,309.40
Ivory.....	44,100.71
Jute.....	83,301.40
Leather, etc.....	69,339.23
Linens.....	81,018.95
Machinery.....	21,530.33
Matches.....	1,647.92
Metals:	
Iron and steel and manufactures..	46,473.66
Other	221,439.45
Mustard.....	63,009.82
Oils	115,114.20
Paper and paper hangings.....	73,367.61
Paper stock	115,511.18
Perfumery.....	9,858.48
Pitch and tar.....	31,910.21
Precious stones.....	458,803.56
Preserves, pickles, etc.....	60,724.34
Provisions (cheese, bacon, etc.).....	12,618.13
Rice.....	22,667.14
Rubber:	
Raw.....	138,777.33
Clothing and manufactures.....	19,341.72
Saddlery.....	9,024.44
Sausage casings.....	13,130.04
Scientific and other instruments.....	13,339.75
Seeds, plants, etc.....	69,001.72
Shellac.....	92,617.38
Shells.....	130,068.29
Silks.....	126,017.57
Soaps.....	51,819.15
Skins, hides, furs, etc.....	1,579,334.98
Spices, etc.....	52,917.53
Sponges.....	18,110.58
Stationery, etc.....	24,460.67
Sticks and canes.....	14,047.68
Straw:	
Plaits and braids.....	260,817.94
Other manufactures.....	98,237.01
Stone (marble, granite, etc.).....	13,244.30
Sugar.....	17,519.62
Tea.....	280,927.57
Tin.....	954,470.55
Tin plates, black plate, etc.....	36,063.34
Tobacco and cigarettes.....	17,452.04
Wearing apparel, etc.....	44,657.82
Wines and spirits.....	57,214.36

Woods.....	\$29,846.36
Wool and camel and other hair.....	2,434,204.48
Woolens.....	937,211.76
Works of art.....	158,460.83
All other articles.....	184,373.20

Total.....	12,159,007.25
Total for same quarter in 1894..	7,596,066.11

Increase.....	4,562,941.14
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Manchester.

Buttons.....	4,558.30
Card clothing.....	24,501.52
Carpets and rugs.....	58,180.64
Cotton.....	16,424.84
Manufactures.....	1,768,823.10
Drugs, chemicals, dyes, etc.....	217,017.66
Elastic.....	31,516.56
Gloves, hosiery, etc.....	161,235.82
Hair (cattle, etc.).....	3,981.18
Hats and felt.....	14,017.32
Lace.....	111,810.99
Leather, etc.....	19,064.94
Linens.....	323,686.37
Machinery.....	358,801.99
Metals (iron and steel and manufactures).....	51,268.24
Paper and paper hangings.....	84,267.55
Paper stock.....	97,383.34
Rubber (clothing and manufactures)...	13,080.46
Silks.....	158,622.29
Wearing apparel, etc.....	7,744.67
Wool and camel and other hair.....	3,206.09
Woolens.....	35,571.42
Yarn.....	16,267.41
All other articles.....	45,774.03

Total.....	3,626,806.73
Total for same quarter in 1894..	1,870,658.34

Increase.....	1,756,148.39
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Newcastle.

Antimony.....	24,702.35
Bricks and tiles.....	632.64
Carpets and rugs.....	2,773.60
Cement.....	6,842.30
Coal and coke.....	7,990.79
Colors, paints, and varnishes.....	4,155.99
Cotton manufactures.....	34,681.67
Drugs, chemicals, dyes, etc.....	58,159.73
Leather, etc.....	13,947.39
Linens.....	5,205.30
Machinery.....	158.16
Metals:	
Iron and steel and manufactures..	12,459.85
Other.....	423.39
Rope, string, etc.....	5,250.95
Salt.....	5,831.14
Seeds, plants, etc.....	3,591.98
Skins, hides, furs, etc.....	35,491.38
Stone (marble, granite, etc.).....	1,868.74
Woods.....	1,669.21
Woolens.....	2,585.40

Flour, oatmeal, and manufactures of...	\$97.33
All other articles.....	5,121.48

Total.....	233,640.77
Total for same quarter in 1894..	237,339.18

Decrease.....	3,698.41
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Nottingham.

Colors, paints, and varnishes.....	18,866.44
Cotton manufactures.....	77,044.22
Cycles.....	2,774.26
Drugs, chemicals, dyes, etc.....	37,216.27
Elastic.....	60,658.91
Glass, china, and earthen ware.....	1,597.74
Gloves, hosiery, etc.....	170,357.39
Grease, etc.....	606.90
Hats and felt.....	1,674.51
Lace.....	1,209,229.74
Leather, etc.....	7,240.81
Linens.....	45,360.46
Machinery.....	29,618.54
Metals (iron and steel and manufactures).....	2,527.70
Silks.....	18,503.46
Skins, hides, furs, etc.....	88,457.14
Woolens.....	4,213.69
All other articles.....	8,185.60

Total.....	1,784,373.78
Total for same quarter in 1894..	1,200,505.19

Increase.....	583,868.59
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Plymouth.

Animals.....	1,520.37
Brushes.....	90.15
China clay, etc.....	62,354.66
Drugs, chemicals, dyes, etc.....	3,576.57
Furniture.....	343.08
Leather, etc.....	236.91
Seeds, plants, etc.....	267.17
Stone (marble, granite, etc.).....	1,291.45
Wearing apparel, etc.....	234.56
Wines and spirits.....	2,183.92
All other articles.....	278.77

Total.....	72,377.61
Total for same quarter in 1894..	60,034.60

Increase.....	12,343.01
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Sheffield.

Animals.....	1,406.56
Beer, ale, stout, etc.....	222.15
Colors, paints, and varnishes.....	358.15
Cotton manufactures.....	169.43
Cutlery.....	142,958.30
Drugs, chemicals, dyes, etc.....	1,510.43
Glue and gelatin.....	19,988.26
Hair (cattle, etc.).....	901.39
Hardware.....	8,896.96
Leather, etc.....	352.82
Linens.....	6,588.01
Machinery.....	724.01

Metals :	
Iron and steel and manufactures..	\$357,665.15
Other	1,715.31
Oils.....	1,113.31
Precious stones.....	984.92
Unions.....	246.61
Horn, bone, gut, and manufactures of..	6,728.27
All other articles.....	448.76
Total.....	547,978.80
Total for same quarter in 1894..	282,050.96
Increase.....	265,927.84

Southampton.

Books, prints, engravings, etc.....	136.00
Furniture.....	675.19
Scientific and other instruments..	140.15
Skins, hides, furs, etc.....	7,511.00
Yarn.....	1,989.56
All other articles.....	2,798.22
Total.....	13,250.12
Total for same quarter in 1894..	19,864.34
Decrease.....	6,614.22

Swansea.

Bricks and tiles.....	2,073.63
Drugs, chemicals, dyes, etc.....	50,221.32
Metals :	
Iron and steel and manufactures..	43,848.64
Other	13,474.51
Oils.....	3,438.03
Stone (marble, granite, etc.).....	255.49
Tin plates, black plate, etc.....	1,288,564.14
All other articles.....	510.90
Total.....	1,402,386.66
Total for same quarter in 1894..	1,359,348.45
Increase.....	43,038.21

Tunstall.

Bricks and tiles.....	1,121.73
China clay, etc.....	8,100.27
Colors, paints, and varnishes.....	2,234.65
Elastic.....	350.39
Glass, china, and earthen ware.....	1,071,325.98
Hardware	2,097.46
Leather, etc.....	316.32
Paper and paper hangings.....	202.33
Stationery, etc.....	233.59
Horn, bone, gut, and manufactures of..	338.00
All other articles.....	637.51
Total.....	1,086,958.23
Total for same quarter in 1894..	497,710.19
Increase.....	589,248.04

Total from United Kingdom.

Animals.....	24,895.92
Antimony	52,246.47
Artificial flowers.....	42,323.97
Bags and bagging.....	111,846.74
Beer, ale, stout, etc.....	404,901.72

Blacking.....	\$6,960.21
Books, prints, engravings, etc.....	356,173.69
Bricks and tiles.....	17,193.29
Bristles.....	59,754.88
Brushes	19,497.75
Burlaps.....	1,001,071.17
Buttons.....	17,684.19
Card clothing.....	83,504.27
Carpets and rugs.....	299,513.36
Cement.....	157,796.56
Chalk.....	6,360.37
China clay, etc.....	139,719.60
Clocks and watches.....	6,862.01
Coal and coke.....	94,636.53
Cocoa and chocolate.....	69,147.52
Coffee.....	112,719.11
Colors, paints, and varnishes.....	126,274.45
Cotton.....	594,527.73
Manufactures.....	3,328,655.81
Cutlery.....	142,958.30
Cycles.....	57,401.58
Drugs, chemicals, dyes, etc.....	2,676,609.70
Elastic.....	97,345.69
Emery and polishing powders.....	4,916.92
Feathers.....	190,287.62
Fish.....	166,301.30
Floor cloth.....	146,271.43
Fruits, nuts, and vegetables.....	475,008.77
Fuller's earth.....	23,727.59
Furniture.....	24,837.47
Glass, china, and earthen ware.....	1,221,094.25
Gloves, hosiery, etc.....	425,677.53
Glue and gelatin.....	98,020.58
Grease, etc.....	208,678.64
Gums	101,222.61
Hair (cattle, etc.).....	80,816.12
Hardware.....	287,811.72
Hats and felt.....	60,015.13
Hemp, flax, tow, etc.....	397,947.74
Indigo.....	81,309.40
Ivory.....	44,100.71
Jute.....	110,776.93
Lace.....	1,367,691.55
Leather, etc.....	144,287.94
Linens.....	3,790,970.45
Linseed	24,021.88
Machinery.....	553,096.29
Matches.....	1,647.92
Metals :	
Iron and steel and manufactures..	809,503.83
Other	275,614.35
Mustard.....	63,009.82
Oils	123,622.05
Ores (iron, etc.).....	5,904.06
Paper and paper hangings.....	176,078.79
Paper stock.....	305,155.95
Perfumery.....	9,858.84
Pitch and tar.....	56,449.45
Precious stones.....	459,788.48
Preserves, pickles, etc.....	77,450.98
Provisions (cheese, bacon, etc.).....	58,980.16
Rice.....	46,980.15
Rope, string, etc.....	8,820.28
Rubber :	
Raw.....	534,460.28
Clothing and manufactures.....	33,000.47

Saddlery.....	\$85,864.59	Tin	\$987,166.15
Salt	135,497.19	Tin plates, black plate, etc.....	3,436,727.94
Sausage casings.....	13,933.01	Tobacco and cigarettes.....	17,817.01
Scientific and other instruments.....	15,450.85	Unions.....	280,861.48
Seeds, plants, etc.....	100,234.23	Wearing apparel, etc.....	57,455.09
Shellac.....	92,617.38	Wines and spirits.....	112,578.79
Shells.....	131,593.15	Woods	77,444.98
Silks.....	394,197.15	Wool and camel and other hair.....	4,007,804.10
Soaps	53,103.11	Woolens.....	5,409,154.28
Skins, hides, furs, etc.....	2,085,111.80	Works of art.....	174,770.50
Spices, etc.....	75,393.29	Yarn.....	393,792.87
Sponges.....	18,110.58	Flour, oatmeal, and manufactures.....	5,362.78
Stationery, etc.....	29,578.67	Horn, bone, gut, and manufactures of..	32,426.51
Sticks and canes.....	14,047.68	Vulcanite (celluloid and manufac- tures).....	3,437.27
Straw :		Manure.....	21,159.53
Plaits and braids.....	260,817.94	All other articles.....	395,713.82
Manufactures.....	98,237.01		
Stuff goods.....	2,391,672.09	Total.....	45,233,001.19
Stone (marble, granite, etc.).....	83,455.34	Total for same quarter in 1894..	25,587,609.23
Sugar	78,993.24		
Tea.....	297,127.63	Increase.....	19,645,391.96
Thread.....	180,492.61		

GUM COPAL (BUCARAMANQUINA) IN COLOMBIA

I have to announce to the Department the formation, on the 19th of June, under the laws of the State of New York, of an American company, bearing the name of the Colombian Algarroba Company, for the purpose of mining and exporting the *resina de Algarroba*, or gum copal, from Colombia.

In CONSULAR REPORTS No. 152 (May, 1893), p. 48, the Department published a report from the consul-general at Bogotá describing a gum (or mineral, as it was then called) found in the alluvial deposits of this country, under the name of "bucaramanquina." Samples of this gum were sent to Washington and are now, I believe, in the custody of the Department of Agriculture. Whether a chemical analysis* of bucaramanquina has been made there as yet I have not learned ; but from the testimony of competent judges in this country, together with what was stated by Consul-General Coughlin in the above-quoted report, I do not hesitate to say that bucaramanquina is identical with the gum copal that will now be exported to the United States for the first time.

The pioneers of this enterprise came to Colombia for a preliminary investigation in January of this year. Their efforts at that time were entirely successful, for after a necessarily hurried search they found large deposits of the valuable material in Gelares, 15 miles from the Magdalena up the San Jorge River; Punta Barrilla, 30 miles up the San Jorge; and Tasecaluma, 7 miles from Magangua, near the San Jorge River. At the last named place the best gum was found.

After spending two months collecting samples in the San Jorge section, the projected enterprise was seen to be in every way secure, and a concession

* For analysis of this gum see CONSULAR REPORTS No. 164 (May, 1894), p. 81.

was accordingly obtained from this Government giving the company the sole right to mine "gum copal" in Colombia for twenty years. In return for this grant, the Government will exact the sum of \$1 (Colombian) for every quintal of copal shipped from this country.

Returning to the United States, a test of the samples procured here by the Algarroba Company was made by Professor Doremus, of New York, with gratifying results, Professor Doremus giving it as his opinion, so I am told, that the new gum would compare most favorably with the famous Kauri gum of New Zealand—the highest grade varnish gum known, so far, to commerce. Gums of this superior quality are at present found only in New Zealand, Zanzibar, and Australia. A few slight formations have been discovered in Mexico, but these have subsequently proved to be of no value. As this gum is the body of all varnishes, it will be readily seen that its production in large quantities in a country so near New York as Colombia is a matter of considerable commercial importance.

As to the expense attached to the mining and shipping of gum copal, I am told that it will not exceed 10 cents per pound landed in New York. The gum is found in large lumps in the soft alluvial soil at the foot of the algarroba tree, and as the labor of digging for it is comparatively light, native women may be employed for the purpose at a cost of 10 cents (Colombian) per diem.

It is intended, also, as a further saving of expense, to take out the gum at Rio Hacha, on the seacoast, where it is said to be plentiful, as well as in the San Jorge section, thus saving transportation on river boats.

The company's headquarters will be either in Barranquilla or Cartagena.

Of course, in view of the practical investigations of the representatives of the Algarroba Company that have been made here so far, it is plainly an error to define this copal, or bucaramanquina, as a mineral, although in many external characteristics it resembles a mineral substance very closely. As a matter of fact, however, gum copal is simply an accumulation of exudations from the algarroba tree extending over an indefinite period of time. The tree itself, which resembles our beech in appearance, can be tapped like a rubber tree; but the sap, or gum, thus produced, lacking the seasoning of age, is practically worthless. Indeed, the deeper in the ground, that is, the older the "resina de algarroba" is found, the more valuable it is as a varnish.

CLIFFORD SMYTH,

CARTAGENA, *July 13, 1895.*

Consul.

AMERICAN OPPORTUNITIES IN URUGUAY.

Judging from the numerous inquiries received at this consulate from merchants and manufacturers in the United States, as well as from persons expressing a desire to come to this country with the idea of settling here, there is no room for doubt that entirely erroneous views prevail among our people

as to the way business is to be done here, and, furthermore as to the advantages Uruguay offers for settlers from other countries.

All explanations given in consular reports covering the very questions above mentioned, and the great many direct replies this consulate has taken pains to send to inquirers, seem to have been insufficient for some people to understand that in order to do business here entirely different ways and means have to be adopted from those by which trade in the United States is governed; and also that in settling or colonizing here they will meet with an entirely different, and, I may say, rather unfavorable condition of affairs in comparison to what people brought up under the laws and habits in the United States are accustomed to.

Unquestionably this country, and, in fact, the entire South American continent, offers a great and almost inexhaustible field for trade to the United States. It is, however, a waste of time and money to assume that trade can be gained by sending circulars and catalogues from the United States in a language not of the land to which they are sent, or by requests made to consuls for lists of names of reliable firms, or other information which may be, very often, not within their reach or sphere.

It is also a mistaken idea to expect to facilitate trade relations with these countries by asking them to come to the United States and make exhibits there at fairs or general exhibitions, considering the fact that the trade exchanges furnished by these countries consist of raw products, the qualities of which are too well known all over the world to need calling special attention thereto, and which for many years have been finding their way to the United States without extra advertising. What is wanted is just the contrary. Exhibits of American manufactures in any or all parts of South America would not only help, but are rather a necessity, if our merchants and manufacturers desire to establish or to increase their trade in these regions.

The fact that the balance of trade has been for years in favor of this country and against the United States, goes to prove the truth of this assertion. These countries do not need to advertise their hides, wools, etc., either in the United States or anywhere else, being well known in the world's marts. It is the people of the United States who ought to make strenuous efforts to exhibit in these countries so as to show to the trade and the public in general what we have to sell and what we are able to do for them, in manufactured goods especially, in competition with the rest of the world.

The following statistics showing the exports from Montevideo (which means all Uruguay), and the imports from the United States to this country go far to substantiate the arguments made in the foregoing.

The total exports from Uruguay to the United States during the four calendar years ending with 1894, were \$1,926,412, \$2,337,914, \$1,491,268, and \$2,085,587, respectively. The total imports from the United States to Uruguay during the same years were \$966,589, \$1,150,804, \$1,153,846, and \$1,546,597, respectively. The trade balance in favor of Uruguay during

the same years was \$959,823, \$1,187,110, \$337,422, and \$538,990, respectively.

The balance in favor of Uruguay in 1895 promises to be far greater than that of any previous year, judging from the amount of exports during the first quarter ending March 31, which is the largest ever recorded, namely, \$1,089,793.

In 1893, imports from all countries to Uruguay amounted to \$20,833,333, and the exports from Uruguay to foreign countries to \$29,166,666. The statistics for the year 1894 show the imports to have been \$24,802,549, and the exports \$34,874,491.

The following table will show the average imports of Uruguay in percentages, comparing the eight principal countries participating therein, during five years:

Countries.	1889.	1890.	1891.	1892.	1893.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
England	28.44	27.17	28.85	30.68	32.55
Germany.....	9.32	8.67	9.72	11.35	10.91
Italy.....	8.85	8.12	10.31	10.98	10.14
France.....	14.98	15.74	13.05	12.28	9.93
Spain.....	7.1	6.71	9.63	9.64	9.38
Brazil.....	6.8	7.64	8.68	7.13	8.13
United States.....	9.26	7.55	4.89	6.01	5.63
Belgium.....	4.42	4.59	3.85	4.54	5.51
All other countries.....	9.82	13.81	9.82	7.38	7.82

There is no reason why the United States should not be able to make a better showing if our people would only make up their minds thereto.

NATIONAL RURAL EXHIBITION.

On the 10th of March of this year, the National Rural Exhibition of Uruguay was opened at Montevideo. Besides a very large selection of fine full-bred cattle, comprising Durham, Herefords, Holsteins, Jerseys, etc., and a fine show of the different breeds of horses and mules, there was an excellent exhibition of sheep, from common to the very finest; a very good and rich exhibit of native wines, wheat, and other agricultural products; and a fair number of farm implements and machinery.

The following American makes of agricultural machinery and farming implements were represented: Oliver Chilled Plow Works, Chattanooga Plow Company, Plano Manufacturing Company, United States Wind Engine and Pump Company, Adriance, Platt & Co., Buckeye Works, Whitman Agricultural Company, A. B. Farquhar & Co., Johnston Harvester Company, King, John Moore's Son Company, Egbert Benson, Aspinwall Manufacturing Company, Keystone Manufacturing Company, Higginum Manufacturing Company, E. P. Dicky, A. H. Patch Manufacturing Company, Air Motor Company, Sandwich Manufacturing Company, Collins & Co., Decre & Co., Syracuse Plow Company, McCormick, Myers & Ervien, Marseilles Manu-

facturing Company, Milwaukee Harvester Company, South Bend Chilled Plow Company, Pitts Agricultural Works, Deering, Challenge Windmill and Feed Mill Manufacturing Company, P. P. Mast & Co., J. I. Case Plow Works, American Road Machine Company. None of these, however, were exhibited under the auspices of the American makers themselves, but, on the contrary, figured under the names of the Montevidean firms who exhibited them to advertise their own business, leaving it to the visitors to take them for English, German, or any other make according to the nationality of the firm in whose exhibit they figured. Thus it will be seen that as numerous as American makers formed part of the exhibition, the benefit to American industry and trade to be derived from this fact can not be expected to be but relatively small.

At the same time, it has to be remarked that agricultural implements and machinery are to-day nearly the only American manufactures introduced here, petroleum, lumber, and resin—products which the people here as all over the world can not help but take from us—forming the bulk of our shipments to this country. And with all that the United States contribute only 5.63 per cent to the total imports of Uruguay. From this may be judged what we can do here when once we begin to push our trade in the right manner. What is wanted in the first place, I repeat, is to bring our goods before the public by direct exhibits at all opportunities offered.

Such opportunity, and, in my judgment, a very excellent one, has suggested itself to me now. There is the probability that the present large building of the Rural Exhibition will be left standing for some time to come. I have been given to understand that permission would eventually be granted by the Government to use this building for an exclusively American industrial exposition as soon as it is seen that American manufacturers show a disposition to avail themselves of this favor. Here is the occasion for the National Association of American Manufacturers to begin to put one of the principal points of their platform—the establishment of permanent exhibitions of American manufactures in the capitals of the South American countries—into practical execution.

By demonstrating to the public whatever advantages our goods possess over European articles of the same class, the battle will be nearly won. To-day business is controlled here chiefly by firms whose natural affiliations are with Europe, and this tendency can be overcome only by the public demand for American goods, thus forcing the merchants to keep them in stock.

That American manufacturers, on their part, will have to learn to be more accommodating to the just requirements of this trade, goes without saying. Once the road is well opened, the true American progressive spirit will soon do away with all difficulties there may be of this kind. The establishment of better banking facilities, so sadly needed, will, I have no doubt, promptly follow.

EDGAR SCHRAMM,

MONTVIDEO, *May 3, 1895.*

Consul.

CATTLE INDUSTRY OF URUGUAY.

No country in the world, in proportion to its size, shows such great wealth in live stock, with its corresponding products, as Uruguay. The tables given below, based upon official figures, will demonstrate better than could be done in any other way the immense productive power of this country, with its 70,000 square miles and a population of about 750,000.

This great and yearly increasing wealth of Uruguay, in connection with the solid, gold basis upon which all mercantile and governmental business rests here, should naturally, and, in fact, does, make it an attraction for all countries desiring to exchange their manufactures for such raw materials as this country so abundantly produces.

The average quality of live stock is inferior to that raised in Texas, but answers the purposes of this country very well. After slaughtering, the meat is cut up in large flat slices; each quarter, after the bones have been taken out, giving one large slice. Then it is salted and sun-dried, and when thoroughly cured, sown up in bags of burlap and shipped to Brazil and the West India Islands under the name of "carne tasajo."

The hides of the cattle here are of superior quality on account of the climate, the cattle being generally in the open air all the year round, and subject neither to great heat in summer nor intense cold in winter.

Of this latter product, large quantities go to the United States tanneries in the form of dry hides (only very recently shipments of salted hides have been commenced to the United States, the latter having previously all gone to Europe), and this, together with the great increase of shipments of wool from Uruguay, should tend to open the eyes of our manufacturers and merchants to the valuable trade this country could furnish them.

Instead of having an exchange of our manufactures, our sales so far have remained far behind our purchases, although by far the largest part of our shipments to this country have consisted of such necessities as lumber, kerosene, etc.,—articles for which the whole world has come to us.

As to the shipments of wool from here to the United States, it may be well to mention that the increase of imports which has taken place since the duty on this staple has been taken off, as far as this market is concerned can only be considered as greatly beneficial to the interests of the United States, from the fact that the fine qualities raised here have never before reached our markets directly, to any great extent, the European markets absorbing very nearly the entire production, and only a small portion reaching us through second hands at such advanced prices that practically this market was not within reach of our manufacturers. As these wools can not be produced in the United States, and, at the same time, are essential for the manufacture of various articles, it is evident that the more cheaply they can be

obtained by our manufacturers the more they will be enabled to increase their sales, not alone at home, but in the competition for the world's markets. At the same time, they will consume more home wool, thereby favoring the increase of production of wool in the United States instead of harming it.

The number of cattle in the Republic of Uruguay in 1893, according to declarations made by owners for tax purposes, was 5,496,975 head, and sheep, 12,249,787 head. The number of cattle and sheep really existing in this country, however, is one-third, if not one-half, more than the above figures, which, based as they are on declarations of owners made for taxing purposes, are naturally deficient. The number of sheep in the country is officially estimated at not less than 20,000,000 head, and the number of cattle at 7,000,000 head. That these latter figures are more or less correct, is borne out by the quantities of meat, hides, and wool exported.

Number of cattle killed in the saladeros of Uruguay and the Argentine Republic.

Years.	Montevideo.	Remainder of Uruguay.	Total in Uruguay.	Buenos Ayres.	Entre Rios.	Total in Argentine Republic.
1890-91.....	233,900	379,600	613,500	448,000	396,600	844,600
1891-92.....	300,000	336,400	636,400	443,200	322,800	766,000
1892-93.....	277,500	470,000	747,500	379,600	362,200	741,800
1893-94.....	400,000	446,100	846,100	.....	.....	.....

Consumption of meat in Montevideo.

Years.	Cattle.	Mutton and lambs.
	<i>Kilograms.</i>	<i>Kilograms.</i>
1891.....	25,087,000	847,435
1892.....	23,756,838	1,145,763
1893.....	21,290,640	1,366,016
1894.....	22,568,819	1,278,960

Cattle, sheep, and pigs sold in the cattle yards of the city of Montevideo.

Year.	Cattle.	Sheep.	Pigs.
1892.....	447,909	72,338	7,704
1893.....	381,414	90,028	6,038
1894.....	554,593	75,636	12,985

Of this, the city of Montevideo consumed in 1892, 147,558 cattle and 49,816 sheep; in 1893, 132,240 cattle and 59,392 sheep; and in 1894, 140,079 cattle and 55,607 sheep. The saladeros consumed, in 1892, 290,381 cattle and 23,450 sheep; in 1893, 237,197 cattle and 15,950 sheep; and in 1894, 379,197 cattle and 16,532 sheep.

Exports of cattle products.

Products.	1891.		1892.	
	Quantity.	Value.	Quantity.	Value.
Oil :				
Foot.....kilograms...	13,829	\$1,936	6,113	\$856
"Potro".....do.....			11,359	1,590
Bones and bone ash.....do.....	11,277,262	245,867	14,010,719	280,108
Shin bones.....do.....	252,908	5,562	380,164	7,603
Carne tasajo (jerked beef).....do.....	33,598,795	3,501,197	39,807,462	4,071,176
Meat :				
Conserved.....do.....			132,310	31,754
Extract.....do.....	711,564	2,134,692	522,437	1,839,979
Liquid.....do.....	1,827	1,827	9,736	19,472
Hides :				
Salted.....number...	810,308	4,200,547	948,271	4,607,519
Dry.....do.....	1,008,747	2,017,491	935,702	1,871,404
Cuttings.....kilograms...	635,610	33,363	497,260	24,863
Unenumerated.....do.....	23,902	524	45,238	885
Grease.....do.....	895,759	102,912	2,908,136	344,162
Tallow.....do.....	13,081,742	1,504,400	11,731,180	1,361,135
Tongues, conserved.....do.....	662,054	139,032	729,724	153,242
Wool.....do.....	5,910,039	8,206,692	27,971,834	7,420,295

Products.	1893.		1894.	
	Quantity.	Value.	Quantity.	Value.
Oil :				
Foot.....kilograms...			16,269	\$2,278
"Potro".....do.....	8,489	\$1,188	315	44
Bones and bone ash.....do.....	14,751,826	295,036	16,553,929	182,893
Shin bones.....do.....	284,552	5,691	427,928	4,539
Carne tasajo (jerked beef).....do.....	43,875,629	4,826,319	55,812,929	5,719,029
Meat :				
Conserved.....do.....	147,472	35,393	22,144	4,469
Extract.....do.....	417,885	1,706,197	648,174	2,271,050
Liquid.....do.....	9,608	19,008	82,150	24,300
Hides :				
Salted.....number...	920,936	4,470,429	1,160,694	4,730,162
Dry.....do.....	1,075,021	1,974,809	921,407	1,715,344
Cuttings.....kilograms...	655,302	32,765	571,307	24,405
Unenumerated.....do.....	6,397	128	51,975	1,039
Grease.....do.....	1,525,422	198,333	1,698,790	177,081
Tallow.....do.....	12,026,652	1,563,465	17,644,302	1,871,881
Tongues, conserved.....do.....	756,828	158,871	794,108	161,163
Wool.....do.....	28,788,642	7,678,420	39,157,334	9,061,013

Exports of cattle on the hoof.

Description.	1893.		1894.	
	Number.	Value.	Number.	Value.
Cattle.....	73,232	\$568,034	84,168	\$645,713
Sheep.....	37,853	18,926	51,501	25,750
Horses.....	15,827	105,065	24,869	168,547

Export duties.

Lard, tallow, animal oils.....	per 100 kilograms...	\$0.50
Carne tasajo.....	do.....	.40
Meat and conserved tongues.....	do.....	1.00
Wool	do.....	1.30
Hide cuttings.....	do.....	.25
Extract of meat.....	per kilogram...	.10

These duties lie as a burden on the producers here. This goes to further show the immense productive power of this country and its yearly increasing wealth.

EDGAR SCHRAMM,
Consul.

MONTEVIDEO, *August 12, 1895.*

PARAGUAYAN-AMERICAN TRADE.

On assuming my official duties, an examination of the consular records demonstrated that during the establishment of a consulate at this post from 1888 to 1894, no business of a commercial nature had passed through the office, nor could the writer discover that any attempt had been made to encourage such business. It is true that some few products of Paraguay had found their way to the United States, but through the medium of Buenos Ayres or Montevideo, and they must have appeared finally as Argentine or Uruguayan products. As this state of affairs was not only unsatisfactory, but appeared to be somewhat in contravention of the Consular Regulations, the writer informed such persons as might be likely to export to the United States that the consulate here was prepared to dispatch invoices, and was also desirous of convincing merchants and others that the United States might become to them as good a field for trade as Europe.

Under a condition of freer commercial relations, the writer believes that a prosperous trade might soon have been worked up. Even now, in spite of commercial restrictions, something has been done, as may be seen by the annual return of exports, just forwarded to the Department, which amounted to \$9,000 (United States gold) within the space of a year, and insignificant as this sum may appear, it still means a demand upon the United States for an equal or greater value in United States products, either directly or indirectly, and demonstrates the principle that distant people, of widely varying importance in the world, can nevertheless aid in supplying the wants of the other to the injury of neither and the benefit of both. The goods exported to the United States consisted of ostrich feathers, aigrette plumes, oxhides, stag hides, carpincho hides, orange oil, and tobacco, all of which products have turned out profitably to the dealers, with the exception of tobacco.

The tobacco trade has resulted disastrously on account of the Paraguayans being ignorant of the wants of the United States market and sending a tobacco to our people such as their old customers—the Argentines—de-

manded, but which is altogether too strong for the tastes of the citizens of the United States.

There would be a good opening here for an energetic United States citizen having a small capital and versed in the tobaccoist's business, for the writer feels bound to say that nowhere in the world can finer tobacco be found for certain purposes, and though it could not enter the field now occupied by our United States tobaccos, it could replace much of the tobacco now brought in from foreign countries to the increase of the demand for those products of United States manufacture of which Paraguay stands so much in need for the development of her natural resources, and which the peculiar genius of our people render the United States so admirably adapted to supply.

United States manufacturers are now in correspondence with this consulate with a desire to send here United States goods, and, of course, the success of their efforts must be measured somewhat by the willingness of the United States to receive Paraguay's products in return.

EBEN M. FLAGG,
Vice-Consul.

ASUNCION, *June 30, 1895.*

PARIS EXPOSITION OF 1900.

The Department of State has received a note from Mr. Patenôtre, the Ambassador of France at Washington, dated October 8, 1895, of which the following is a translation, omitting the nonessential portions:

The Government of the French Republic, desirous to maintain the tradition which has established the term of eleven years as the period of renewing our international expositions, has decided, as you are aware, that our universal exposition of works of art and of industrial and agricultural products shall take place at Paris in 1900.

On the 13th of July, 1892, a Presidential decree announced the rule for it. Since then, Parliament has participated in this act of the executive power by voting several credits for preliminary measures. Successive decrees have organized the functions, appointed a commissioner-general, and approved the regulations for the future exposition, as well as the classification of the articles exhibited.

A competition was established concerning provisions for the halls, parks, and gardens combined. The consideration of details begun as a consequence of this competition, draws to a close. A complete understanding has been established between the Government and the municipality of Paris on the subject of the plan to adopt, and of the pecuniary contribution of the city, and the chambers will soon be acquainted with the draft of the law relative to the ways and means of the enterprise.

It is already understood that the exposition of 1900 will be held from the 15th of April to the 5th of November. It will receive works of art, agricultural and industrial products, and other articles included in the classification. All nations are invited to take part in it.

To the contemporary exposition, will be added a retrospective centennial exposition presenting a summary of the progress accomplished since 1800 in the different branches of production.

The plans adopted have essentially the object of placing the means of production in intimate contact with products. Everywhere machinery and appliances will, as far as possible, be in operation in sight of the public, by way of instructing it in different manufactures.

Special expositions.—Historical exposition of French art, anthropological and stenographical exposition, competition for agricultural machines, competition for live animals, etc. Musical receptions and congresses will complete the programme.

The site for the exposition of 1900 comprises the Champ de Mars, the Trocadero and its approaches, the Quai d'Orsay, the Place des Invalides, The Quai de la Conference, the Cours de la Reine, the Palais de l'Industrie, and the neighboring grounds.

Connection will be established between the shores of the Seine, notably by a bridge opposite the Hotel des Invalides.

The declared regulation announces the very liberal measures regarding the sites occupied free of cost by the exhibitors of the palace and general pavilions of the exposition, the customs system to which the exhibited articles will be subjected, and the protection of these articles.

Every foreign nation taking part in the exposition ought to be represented near the commissioner-general by a delegate whose exclusive care it shall be to deal with questions interesting to his countrymen.

The administration of the exposition will not correspond with foreign exhibitors. It can not derogate from this rule except in favor of the retrospective centennial exposition.

In directing me to bring this information to your knowledge, the Government of the Republic entertains the hope that the Government of the United States will kindly lend its official cooperation to this work of international progress, which can but draw closer the ties of friendship which unite the two countries.

PARIS CONFERENCE ON WEIGHTS AND MEASURES.

Referring to previous correspondence concerning the general conference on weights and measures, and particularly to Department's No. 518 of September 4, authorizing Mr. Vignaud and myself to act as delegates of the United States at said conference, I send herewith our report giving a brief account of the proceedings and action of the conference.

J. B. EUSTIS,
Ambassador.

PARIS, *September 27, 1895.*

SECOND GENERAL CONFERENCE ON WEIGHTS AND MEASURES, HELD AT PARIS FROM SEPTEMBER 4 TO SEPTEMBER 14, 1895.

The first meeting of the conference was purely formal. It took place at the Foreign Office under the presidency of Mr. Hanotaux, who, in an opening speech, congratulated the international committee of weights and measures, whose labors had facilitated the extension of the metrical system, which was gaining ground everywhere, and particularly in England.

The second meeting was held September 6, in the rooms of the international committee at Sevres, near Paris. M. Marey, president of the French Academy of Sciences, took the chair. The credentials of the delegates were presented and recorded, and it was found that nineteen States were represented at the conference, viz, Austria, Belgium, Denmark, France, Germany, Great Britain, Hungary, Italy, Japan, Mexico, Norway, Portugal, Roumania, Russia,

Servia, Spain, Sweden, Switzerland, and the United States. Peru and the Argentine Republic, although parties to the convention, were not represented. Tunis, having made known its intention to accede to the convention, had a delegate, who took no part, however, in the proceedings.

The conference, after having by acclamation chosen Dr. Hirsch as its secretary, adjourned to the 11th of September. This third sitting was entirely of a scientific character.

The conference approved the calculations made by the International Bureau of Weights and Measures concerning the equation of the meter constructed for Roumania and the equation between the yard and the meter. It also approved the proposition of the committee to consider the wave length of light as the prototype of the meter, and decided to apply to the payment of the extraordinary contribution voted in 1894 the money received for arrears.

After a protracted debate, the conference adopted the following resolution: "The general conference of weights and measures, availing itself of the right conferred by article 7 of the rules annexed to the metric convention, earnestly recommends to the high contracting parties the propositions and the requests which will be submitted to them by the international committee of weights and measures concerning the creation of a pension and relief fund in favor of the personnel of the international bureau, and of a reserve fund to guaranty the regular working of the international bureau, and concerning, also, the use, as initial fund for the above mentioned creation, of the extraordinary resources derived from the payment of arrears."

At the fourth sitting, held September 11, the conference decided to proceed in 1899 to make the periodical comparison of the prototypes of the kilograms and thermometers accompanying the prototype meters provided for by article 6 of the convention.

The conference then proceeded to elect by secret ballot, half (seven) of the members of the international committee whose terms had expired and two other members to fill vacancies caused by resignation. The following gentlemen were elected: Messrs. Bertrand, Chaney, d'Arillaga de Bodola, Hepites, von Lang, Thalen Ferraris, and Mendeleff. The new international committee (fourteen members) is therefore composed of the gentlemen above named and the five remaining members of the old committee—Messrs. Anderson, Foerster, Gould, Hirsh, and Macedo—and the two members elected to fill vacancies.

The conference finally decided to furnish to those engaged in advocating the adoption of the metric system in the English-speaking countries such scientific and statistical data as they may desire.

J. B. EUSTIS,
HENRY VIGNAUD,
Delegates.

COTTON MILLS IN CHINA.

The fourth provision, article 6, of the treaty of peace between Japan and China, made at Shimonoseki, Japan, April 17, 1895, reads as follows:

Japanese subjects shall be free to engage in all kinds of manufacturing industries in all of the open cities, towns, and ports of China, and shall be at liberty to import into China all kinds of machinery, paying only the stipulated import duties thereon.

This provision materially enlarges the area for enterprise and trade in Asia, and as commerce is recognized as the great civilizing agency, Japan has accomplished more for Asiatic civilization on that line than a century of European diplomacy and arms. The opening has been made for the introduction of a great industry into the vast empire of China, and though for the present confined to the open ports and cities, the influence will be far-

reaching, and public and private thought will be awakened and directed into new industrial channels.

Doubtless under the influence of the provision named, the Shanghai Chamber of Commerce, at the meeting on May 20, 1895, was able, through its chairman, to make the following announcements:

The question as to the right of importing machinery for the purpose of cotton spinning has been settled in favor of Messrs. Jardine, Matheson & Co., who, for some months past, had machinery lying here waiting for permission to land it. A cotton mill under British management will be erected immediately.

The prospectus for the first cotton mill to be erected under the new auspices, and the announcement of which elicited the applause of the Shanghai Chamber of Commerce, is now before the public. The capital is 1,000,000 taels,* divided into 10,000 shares of 100 taels each. The prospectus states that "the company is formed to take advantage of the increasing demand on this market for coarse counts of cotton yarn by erecting, to begin with, a spinning mill of about 28,000 spindles, and availing of an abundant supply of locally grown cotton and plentiful cheap labor, a yarn can be produced which will command a ready sale at handsome profits." A calculation is made upon the basis of the average cost of raw material during the last two years, the lowest price at which locally spun yarn has sold during its introduction, and making provision for the most liberal estimate of working expenses, estimated on the experience of existing mills, and writing off 10 per cent per annum from value of machinery, the prospectus anticipates for the company a handsome net profit on the capital proposed. The 10,000 shares were promptly sold.

At this writing, there are in contemplation three large cotton mills, and a prospectus for each mill is now before the public—the one named, another for a mill of 40,000 spindles, and a third for 28,000 spindles. The larger mill will be under the general management of a well-known American firm, and in the prospectus an estimate of the expenditure on capital account of a cotton mill of 40,000 spindles is presented: The cost of the machinery for the plant is estimated at 500,000 taels, the land improvement at 40,000 taels, preliminary expenses and contingencies at 10,000 taels.

The ready value of the output of such a mill, working three hundred days, with a proper deduction for brokerage, is estimated at 1,611,900 taels.

The expenditure, including raw material, cost of working, duty (if any is incurred), expense of management and depreciation in machinery and building, is estimated at 1,475,630 taels, leaving a balance available for dividends of, say, 17 per cent on 800,000 taels.

The dividend anticipated from the expense and profit account thus stated is based upon other considerations. In one prospectus, it is argued that experiments, made and verified by the experience of existing local mills, show that locally produced yarns are superior to Indian yarns, in which so great a trade has, in recent years, been established; and that there is no

* The Tien-Tsin or trade tael equaled 76.1 cents in United States currency July 1, 1895.

reason why such yarns should continue to be imported when similar yarns can be manufactured at Shanghai, and of a superior grade.

The import of Indian yarns during the past four years at Shanghai annually averages over 195,000 bales of 3 piculs each (1 picul= $133\frac{1}{3}$ pounds), while the principal ports in the south of China have taken during the same period an average of 136,000 bales.

In the calculation, there does not seem to be any apprehension as to a sufficient supply of raw material for the mills. In 1886, the export of cotton from Shanghai to Japan was 47,600 piculs, and the total export 278,600 piculs. In 1894, Japan took 576,000 piculs, and the total amount of cotton which left Shanghai was 930,400 piculs. It may be noted that the large increase in the exportation did not increase the price of cotton, and this may confirm the opinion among business men here that the Chinese are prepared to extend the area of the cultivation of cotton in proportion as the demand arises. Along the Yangtse valley, the soil available for cotton cultivation appears as limitless as the supply of labor in China appears inexhaustible. It is seen, after supplying the local demand, what a large quantity of cotton was exported during the past year, and it is estimated that this exported cotton would run 360,000 spindles in addition to those already at work.

There are three cotton mills now at work here, with, in all, 66,200 spindles, and three more, with 49,000 spindles, about to begin operations. Adding these to the three, the plans or outlines of which are now before the public, and which have been referred to, there will, ere a great while, be nine cotton mills in full operation with a total spinning capacity of 265,200 spindles.

There are four ginning mills of 176 gins in all. These gins are Japanese imitations of foreign gins, and ginning machines are used throughout this cotton district, made in Japan and worked by the feet.

The machinery for the mills is made in Great Britain. The cost for a complete plant averages about \$4 (American) per spindle. The native spindle is very rudimentary, roughly made of bamboo, and can be purchased for \$1 (Mexican); but many of the Chinese women now prefer to receive the yarn spun at the mills and weave it into cloth.

Raw cotton is procured for the mills from the producer through Chinese agents, who travel the cotton-producing districts and arrange for the purchase and delivery of the raw cotton when ready for shipment, which is usually conveyed to the mills in junks and small boats, at a small cost and convenient alike to seller and buyer, as the mills are situated by the river side, favorable to the reception and export of the material. The price of raw cotton is about 12 Haikwan taels per picul, and a bale of yarn of 3 piculs weight will average about 61 taels. Skilled male labor is worth 30 cents (about 17 cents gold) per day, and skilled female labor 20 cents.

With the same improved machinery, an ample supply of raw cotton, and labor at such low prices, the advantage of an Asiatic over a Western cotton mill

is quite evident. Before China can manufacture fine cotton, however, there must be a very material improvement in the grade of the raw product, but the Chinese people wear coarse cotton and prefer it because they are poor and not able to buy the finer material. I am writing of the needs of the great masses of the Chinese, as the wealthy class wear silk principally.

CULTIVATION OF COTTON IN CHINA.

Cotton is not cultivated in China as in the United States. The preparation of the soil and the planting and cultivation are different. The ridges are wide like the ridges of an American wheat field, and the seed is sown as the American farmer sows wheat. Consequently, the plants are very thick, and the Chinese cotton farmer cultivates every plant to the full maturity possible. The necessity for sufficient space for the plant to grow and branch is not admitted, and, when matured, the stalk is small and the limbs comparatively few. This thickness of growth necessarily results in small bolls and a short staple. To look at an acre of Chinese cotton when full grown, leaves an impression favorable to great yielding capacity, which the actual yield is far from fulfilling. The thickness of the plants, standing so close together, keeps off the action of the sun and causes many of the bolls to wither in the shade, and also prevents many from maturing. The hoe used for working cotton is very narrow in order that the laborer may thread his way, as it were, between the thick standing plants. When the Chinese are taught the advantage of properly spacing their cotton rows and thinning the cotton plant so that the warm air and the rays of the sun can freely penetrate, the change from the present system of cultivation will be rewarded by an increased yield per acre and a much finer staple.

COTTON SPINNING IN JAPAN.

Having indicated the growing interest of the cotton-spinning industry in China, it will be interesting, by way of comparison, to trace the origin of the same industry which has grown to such proportions in Japan.

The first spinning factory in Japan was established in Kagoshima more than forty years ago by the greatest feudal prince of modern times. The name of this great Satsuma prince was Shimazu Harihisa, who, although born and bred to arms, and the lord of a province noted in Japanese annals for the martial prowess of its inhabitants, saw, with the eye of a statesman, the commercial advantage in the geographical position of his country, and that in peace Japan could win wealth as the manufacturing emporium for Asia. In 1867, the second cotton mill in Japan was built in Oji, and these two were the only spinning factories until 1870. In 1870, two others were established by the Japanese Government, four more in 1880, four in 1881, one in 1882, one in 1883, and one in 1884. These factories are now operated by private companies, and are in a prosperous condition, working 92,978 spindles.

The rapid progress of the industry is evidenced by the fact that there are in operation and in course of construction forty-eight factories, aggregating 819,115 spindles, of which 580,564 are in actual operation.

BANKING PROJECTS IN JAPAN AND CHINA.

In connection with the manufacturing progress of Japan, the inquiry as to what Japan proposes to do on the line of financial progress seems pertinent, and may be partially answered by reference to a plan of her Minister of Finance, Count Matsukata. According to the *Chuo Shimbun*, a leading Japanese Journal, the minister thinks that one of the first duties of his office is to provide cheap capital for agriculturists and industrials. The loans contracted by these two classes are estimated to aggregate 300,000,000 yen,* and that the rate of interest is from 10 to 15 per cent. With such a burden, the minister concludes that the farmers and manufacturers of Japan can not compete with western rivals, or even with their neighbors, the Chinese; and it is proposed to remedy the evil by bringing cheap capital within easier reach by the establishment of two great banks, an agricultural bank and an industrial bank.

It is believed that China has in contemplation a banking system, organized after western systems, taking from each such parts as could be more readily utilized. There are now many banks in China, and circular letters of credit through the Empire can be easily obtained. The system of remittance by draft is about as complete as in any other country. The coin generally in use by the people is called a "cash." Its chief ingredient should be copper, and in shape it should be thin and circular, rather more than an inch in diameter, with a square hole in the middle for the convenience of stringing. The value of the "cash" varies in different parts of the Empire, but usually it requires about one thousand of them to buy a Mexican silver dollar. The inconvenience of such a currency in making purchases of much value is evident, and the need of a coin of more intrinsic value is supplied by what is called a tael, which is a piece of silver weighing one ounce, the value being determined by the weight. The gold bullion is cast into bars like cakes of India ink, weighing about 10 ounces, or is hammered into thick leaves which can be examined but not separated by driving a punch through a hundred or more—a precaution against cheating.

History assigns a long ancestry to coinage in China, tracing its descent from about 2000 B. C., and dating the issue of the first note long before the adoption of bank notes in Europe—three hundred years before the establishment of the Stockholm Bank, the first bank in Europe to issue notes. In attestation of the issue of notes, there is said to be one in King's Library, in the British Museum, which passed as currency during the reign of an Emperor from 1368 to 1399. This note is supposed to be the oldest in existence. Under the Mongol dynasty, paper money was issued in immense quantities, and in writing of the power and splendor of the Grand Khan,

* The yen equaled 52.4 cents in United States currency, July 1, 1895.

Marco Polo refers to the issue of paper money during his reign in these words:

So he buys such a quantity of those precious things every year that his treasure is endless, while all the while the money he pays away costs him nothing at all.

But here the historian and eulogist of Kubla is in error. The immense quantities of paper money issued may have cost the Grand Khan "nothing at all," but when the people realized that they had nothing but paper to show for their valuables they had parted with, the rebellion of Hungun (A. D. 1359) was so encouraged and strengthened as to end in the expulsion of the Khan's successor from the throne. The people of China resented the doctrine of an irredeemable paper currency to the extent of a revolution, which overthrew the dynasty responsible for the dishonorable principle.

PROPOSED AMERICAN BANK.

Connected with the subject of currency, I wish to again submit the importance of establishing an American bank at Shanghai. Such an institution would evidence the permanency of American interests in China and prove the means of facilitating and enlarging business connections with the United States. To business men, the nature of such means will readily suggest itself.

The greater part of the trade between China and the United States is paid for in exchange negotiated through British banks in China, and these institutions make the profits on exchange which could be made by an American bank. This is one loss to American interests. Another is that British manufacturers buy largely American raw cotton, manufacture it at Manchester and other places, and sell it to China. So on both sides, the United States are the source of profit for others, when the profits should and could be realized at home. There is no reason why an American bank at Shanghai would not prove a convenient medium for exporters and importers to do a large exchange business, in addition to other profits arising from the proper utilization of banking functions. And, certainly, if foreign nations can go to the cotton fields of the United States, buy our raw cotton, ship it 3,000 miles, manufacture it, and then ship the manufactured product 10,000 miles to China, at a profit, why can not the manufacturers of the United States, having their factories where the cotton is made, manufacture and ship the product about 4,000 miles to China, at a profit? This, to me, appears to be an inquiry touching American patriotism as well as the pride of American business men. The energy and capacity of our British friends are commended, but the subject appeals no less to American business capacity.

JAPANESE DEMAND FOR AMERICAN COTTON.

If American cotton can not be manufactured and the manufactured product sold in Asia at a profit, then it may be that the raw product can be sold to Japanese mills at a profit. Japan can not produce sufficient raw cotton to supply her mills, and as the cotton mills now operated and to be operated

in China will ere long take what cotton China may produce, Japan will be forced to look to other fields than China for her supply. The logic is seen in the annually increasing demand of Japanese mills for American cotton, and the statistics show that the demand was more than five times greater during the past than for any preceding year.

T. R. JERNIGAN,
Consul-General.

SHANGHAI, *August 26, 1895.*

TRADE OF CHINA IN 1894.*

The report for the year 1894 on the foreign trade of China, prepared by the secretary of the British legation at Peking and published by the Foreign Office in August of this year, is one of exceptional interest and deserves more than a passing mention. The writer of the report says the most remarkable feature of the trade reports for 1894 is the fact that good results have been obtained, and a promising revival of commercial prosperity has set in, in spite of numerous obstacles to success. In the early part of the year, a serious drought prevailed in southern China, and the plague at Hongkong and Canton seriously affected business with the colony. The outbreak of war naturally entailed great uncertainty and dread of attack at the ports. Floods damaged cereals in the north, and during the autumn a succession of destructive typhoons in southern China injured the rice and sugar crops. Yet, notwithstanding all these hindrances, as well as the disturbance to industries caused by the mobilization of troops throughout the provinces and the increase of taxation for military expenditure, a satisfactory and prosperous year may be recorded as far as trade is concerned. The customs revenue was increased by every division of trade, with the sole exception of Indian opium. Both imports and exports show an advance, the receipts from the latter exceeding the maximum collected during the most prosperous days of the tea trade. This unlooked for revival of trade is accounted for as follows:

In trying to account for this anomaly, we must recognize the fact that the usual calamities of war were practically absent. No ports were blockaded, there was no harassing of the merchants, no seizing or overhauling of their ships (with a few exceptions, mostly toward the end of hostilities), in fact, no interference whatever with the ordinary course of business. The Chinese coasting steamers were simply transferred to a neutral flag, and those on the rivers remained unmolested under their own flag, so that the carrying facilities were not curtailed in any respect.

With the exception of the weekly Japanese mail steamers, it can not be said that any vessel formerly plying in Chinese waters ceased running.

The plague in Hongkong hardly affected trade outside of that colony. The coasting steamers from Hongkong ran as usual, and simple but effective quarantine regulations at Shanghai and other ports prevented any serious interruption of trade.

The drought and famine in various parts of the Empire were not more than the average annually recorded in China.

* Prepared in the Department of State.

We must conclude, therefore, that the revival of trade, the general prosperity, and the promise of future expansion, were all due to the inherent staunchness of the position. As regards imports, the consuming markets were not overstocked by old accumulations; former stocks had generally been absorbed, and the current prices of the year were, on the whole, moderate and safe to the importers and consumers of the chief staples. Fair profits may reasonably be presumed to have been made in all branches of commerce.

Fluctuations in the value of silver, though occurring, were less violent, and while exposing the importer to less risk, also afforded more confidence to the exporter. This is well illustrated by the results of the year's operations, almost every exporter having done well.

We may well conclude that the revival which, under unchanged circumstances we may expect to continue, is the natural result of the range of values of exports and imports having reached a sound and safe basis, and of a moderate steadiness in exchange, which had reached a low standard. It may also be considered as being the result of careful dealing and absence of speculation during the previous year, and of the general elasticity of commerce among a well-to-do people with essentially trading instincts, and inhabiting a country very rich in productive resources.

It is also interesting to note, in this connection, as showing what little impression the war with a foreign power conducted within the confines of the Chinese Empire produces upon the people of nearly adjacent provinces, that the consul of Chinking reports that "the progress of the war has not interfered with the growth of a more favorable feeling toward foreigners; indeed, the people take but small interest in the war; they know but little of what has actually happened; they are devoid of patriotic feeling, and their pockets are as yet untouched by extra taxation for war purposes."

The British consul at Chefoo views the result of the recent war with Japan upon the future development of China in quite another light. He "fears that the only lesson which the Chinese will learn from their misfortunes is the need of more warlike material, an increase of hatred of foreign nations, and a greater desire than ever to keep them aloof by fair means or foul. Instead of merchant steamers they will purchase men-of-war, heavy guns instead of railway plants, and ammunition instead of useful machinery."

The consul-general at Shanghai mentions a fact of especial interest to the United States: "Stability in the value of silver is the one desideratum of the foreign merchant in the far East; and it is pointed out that fluctuations in it must really affect the well-being of the entire population of the United Kingdom. * * * Under the influence of cheap silver, the volume of exports continues to expand, and the European consumer reaps the benefit of their cheapness in gold prices. The fall in silver and low freights have combined to enable the majority of the staple exports of China to be laid down in Europe at about one-half the cost at which they could be sold twenty years ago."

The trade of Tien-Tsin, as was to be expected by its contiguity to the seat of war, was very prejudicially affected in 1894, but the importance of Tien-Tsin, to which converges nearly all the trade of northern China, Mongolia, and even a large portion of northwestern China, is so great, and the possibilities of the greater extension in its trade so important, that the fol-

lowing remarks, taken from the Peking and Tien-Tsin Times, of March 30, 1895, and quoted in the British report, are of great interest:

It is upon the question of railway extension that the future of Tien-Tsin depends. * * * Since 1882, the Mongolian trade has increased by leaps and bounds. In fifteen years, the export value of sheep's wool alone has increased eighteenfold, and all other articles included in the trade have more than justified reasonable expectations.

To remove the difficulties and disadvantages under which the trade has hitherto labored, railway communication is the precise remedy required. At the present time, it costs no less than 2.80 taels to bring a bale of wool from Kuei-hua-cheng, the great center, through which probably 75 per cent of the wool passes on its way down to Tien-Tsin. By rail, the charge might easily be reduced to 50 cents. * * * The future prosperity of Tien-Tsin depends primarily upon the increase of our exports, and this a railway to the great northwest would as by magic effect.

In his report, the writer makes some recommendations as to increasing the sale of foreign goods in China, which appear highly practicable. He says:

I would draw attention to the recommendations given as to the establishment of show yards for machinery and emporiums for the exhibition and explanation of samples of foreign goods generally, for the purpose of advertisement, in the place of the innumerable and often costly circulars at present sent to our consuls for distribution, and which represent a simple waste of money, since they are unaccompanied by any translation in Chinese or price list in the currency of the country. The Chinese naturally like to see the goods they are invited to purchase, to have their use explained, and learn how the articles can be repaired if damaged. This plan has already been adopted at some of the larger treaty ports, and its extension to the smaller ones could hardly fail to be attended by satisfactory results.

Referring to new articles of import, it is interesting to find that concurrently with the decrease in the importation of foreign opium, is found an increase in the use of morphia. The consul at Amoy says:

There is as much as 800 ounces imported during one month. A considerable portion of this is used for hypodermic injection; the practice is greatly on the increase, and is carried on at many establishments in the city. This habit is judged by medical men to be more injurious than opium smoking. Habitual opium smokers taking to morphine injections are enabled to abstain from the opium pipe, but are by no means cured of opium smoking, as cessation from the injections inevitably leads to an increased indulgence in smoking. Moreover, no care is taken to keep the syringes properly cleaned, and evil consequences frequently result from the insertion of dirty instruments into the skin.

Commenting on the terms of the recent treaty of peace between China and Japan, the writer makes the following important remark:

From clause 4, it will be observed that articles manufactured in China are to enjoy, in respect to internal taxes and inland transit, the same privileges and exemptions as merchandise imported from abroad. This means that articles of native manufacture will, in future, be conveyed to the inland markets on payment of a transit duty of $2\frac{1}{2}$ per cent ad valorem, as compared with the $7\frac{1}{2}$ per cent (5 per cent import duty plus $2\frac{1}{2}$ per cent transit duty) which Manchester and Indian goods of a similar kind are obliged to pay in order to reach the same destination.

This same treaty opens to Japanese trade, and consequently, under the favored-nation clause, to other powers which have treaties with China, four new ports, two of which are situated near Shanghai. These are Soochow and Hangchow, and several pages of the report under consideration are devoted to these two localities and their commercial importance. From this report "it will be evident that none of the British firms connected with the import trade in China will be likely to open branches at Soochow and Hangchow, and that if any merchant does so, he will have but little chance of meeting with success." It is also remarked that "the country around the two cities produces cotton, and can be made to grow more if demand for it be stimulated. Ginning mills, spinning mills, and, finally, weaving mills must become numerous in the country. The first impulse of foreigners will certainly be to prefer for the purpose Shanghai and even Ningpo to either of the two new ports. But if the fiscal arrangements be such that the latter can obtain raw material without paying an inland duty, while the old ports are not so fortunate, then mills sufficient to exhaust the local produce will certainly be built at Soochow and Hangchow."

On the whole, it would appear that the opening of these two localities to foreign commerce will have very little influence on the volume and value of foreign trade. This trade will continue as in the past, in all probability, to be conducted at Shanghai, which is the port of shipment, and where there are much greater banking facilities than at these two other localities.

In conclusion, the writer of this report comments on the results of the war with Japan and the probable extension of trade in the following words:

It appears to me an inevitable result of the war with Japan that the eyes of all the principal foreign powers will be turned toward China and Korea, watching and waiting for the extension of trade in various branches which may reasonably be expected to ensue.

The revival of commerce which has taken place in these countries, notwithstanding the numerous and serious hindrances in the way of progress and prosperity, is alone a fair warrant of future promise.

Even, if, as may be the case, China has learned no lesson by the war, yet it seems scarcely credible that she will be able to avoid some measures of reorganization, if not merely in self-defense, at least by the necessity of providing money for the large indemnity which must be paid.

If China is ever to stand alone and cease to be a helpless victim of any assailant, she must have a new fleet, an honest financial administration, and an army reorganized after an European model. More than this, or rather in order to obtain these things, she must construct railways, open mines, build roads, and generally develop the great latent resources of the Empire.

With respect to the partial or more extended opening up of China and the development of trade and industries therein, it can not be too strongly impressed upon British capitalists, contractors, manufacturers, merchants, and all who have any interest in the trade of the far East that the strength of foreign competition is, and will be, very great. It is necessary in the first instance for them to take adequate measures to prevent their enterprises being fore-stalled and eclipsed by their numerous rivals.

For this purpose, it is here suggested that the said merchants, etc., would do well to see, without delay, that they are ably and efficiently represented in China by agents duly qualified to further their interests and to hold their own against all competitors.

STATUS OF FOREIGN JEWS IN RUSSIA.

Referring to my dispatch of July 24, in regard to the refusal of the Russian consul at New York to visé the passports of American citizens of Jewish descent, I now have to inclose copy and translation of a note, dated August 12-24, from Prince Lobanow, in response to my request for a copy of the laws and regulations bearing upon the admission of foreign Jews. I inclose copy and translation of the laws in question.

CLIFTON R. BRECKINRIDGE,
Minister.

ST. PETERSBURG, *August 28, 1895.*

[Translation.]

IMPERIAL MINISTRY OF FOREIGN AFFAIRS,
DEPARTMENT OF INTERNAL RELATIONS,
ST. PETERSBURG, *August 12-24, 1895.*

MR. MINISTER: Answering the request which you have had the goodness to express in your note of July 8-20 last, I have the honor to transmit to you herewith a translation, made from the most recent authentic texts, of the Russian laws governing the conditions of entrance and establishment of foreign Israelites upon territory of the Empire.

Since you have had the goodness to refer to it, and in conformity with what I have had the honor to explain to you in my preceding note, the Russian law places certain restrictions on the entrance of Israelites in question on our territory; but these restrictions are far from implying an absolute interdiction, and they have their source in considerations of a kind essentially administrative and economic.

The imperial Government, having already many millions of Jewish subjects, only admits their congeners of foreign allegiance when they seem to present a guaranty that they will not be a charge and a parasitic element in the State, but will be able, on the contrary, to be useful to the internal development of the country. It is because he had it in view to protect himself from an influx of a proletariat of this nature that the Russian legislator has established clearly the categories of Israelites of whom the entrance on our territory can be admitted.

Receive, Mr. Minister, the assurance of my most distinguished consideration.

LOBANOW.

Mr. CLIFTON R. BRECKINRIDGE,
Etc., etc., etc.

PROVISIONS OF THE RUSSIAN LAW RELATIVE TO THE ENTRY OF FOREIGN ISRAELITES
AND THEIR ESTABLISHMENT ON THE TERRITORY OF THE EMPIRE, AS ALSO THEIR
ADMISSION TO RUSSIAN SUBJECTION.

(1) Foreign Israelites, and especially those who are agents of important foreign commercial houses, are permitted to visit the manufacturing and commercial localities of Russia, known as such, and to reside there a certain length of time, according to the circumstances of the case. It is the province of the Ministry of the Interior to authorize the requests pre-

sented to this end by the Israelites in question. But in the case of a banker or a chief of a commercial house of known importance,* the legations and consulates may, even without previous authorization from the Ministry of the Interior, issue and use passports for them to enter Russia, according to the same regulations which apply to all foreigners who come upon Russian territory, but under the conditions of informing the Ministry of the Interior of every passport granted or visaed for an Israelite of that category. (Art. 289, T. XIV, of Res. of Laws, Ed. of 1890.)

(2) Foreign Israelites are not permitted to establish themselves in Russia, nor to become Russian subjects.

(*Remark.*) Exception to this rule is made in favor of Israelites native of central Asia, without distinction as to the subjection to which they belong. These Israelites, on presentation by them of a certificate of good conduct in due form, may receive from the Ministry of the Interior and from the respective Governors-General authorization to become Russian subjects, being included in the rolls of the population of the frontier towns of the province of Orenburg or of Turkestan, under the condition of their entering the merchant guilds, and being admitted to the enjoyment of the rights conferred on Jewish Russian subjects. (Art. 992, T. IX, of Res. of Laws, Ed. of 1890.)

(3) Among foreign Israelites, there are permitted to establish themselves in a permanent manner in the regions where Israelites enjoy the right of permanent establishment, only the following categories: (a) Those whom the Government judge necessary to exercise the functions of rabbi; (b) physicians whom the Government can employ in the administration of war and the navy; (c) those who come to Russia for the purpose of founding factories and works, except brandy distilleries, and who furnish proof that they provide a capital for that purpose of at least 15,000 rubles. These Israelites, on entering Russia, must engage in writing to found these establishments within three years. In default of this engagement, they will be expelled from the territory of the Empire. If this engagement has been fulfilled, they may become Russian subjects, matriculating for this purpose according to law; (d) operatives whom the Jewish manufacturers bring to work in the factories. They are admitted on presentation, first, of their passports, second, of certificates of Russian legations or consulates containing a statement of their condition, of their former occupation, of their trade, of the name of the person who brought them, and of the purpose for which they are destined. These operatives are admitted to live permanently in the regions where Jews have the right to establish themselves permanently, and can take oath for the purpose of being received into Russian subjection after not less than five years' of sojourn in the factories, after they have received from their patrons and from the local authority a certificate of good habits and industry. (Art. 290, T. XIV, of Res. of Laws, Ed. 1890.)

(4) Foreigners are authorized to take out patents for engaging in commerce (certificates of guilds) and trade, and to enjoy all the rights pertaining to the possession of these patents on the same footing as persons born in the subjection of the Empire.

(*Remark.*) With regard to Jewish foreign subjects, the following rules are established: It is permitted to foreign Jews coming to Russia, and who are favorably known for their social position and for the extent of their commercial business—and this each time in virtue of a special authorization granted on agreement to that effect between the Ministers of Finance, of the Interior, and Foreign Affairs—to engage in commerce in the Empire and to establish in it banking offices, on being furnished with a patent of commerce of the first guild for that purpose. It is permitted equally to these Israelites to establish factories, to acquire

* By virtue of an imperial order dated March 14, 1891, the power of the legations and consulates to grant and visé, without previous authorization of the Ministry of the Interior, passports for entry into Russia to foreign Israelites of that category (namely, bankers and chiefs of important commercial houses) is extended equally to the visé of passports of brokers, representatives, clerks, and agents of houses of commerce above mentioned, when they are furnished with papers legally authorizing them, granted by the houses, and attesting their capacity. Within the terms of the same decree, are recognized as important commercial houses the published and registered firms conjoining to the local laws of the jurisdiction of the diplomatic or consular agent.

and hold on lease real estate, except land inhabited in the country, observing the provisions of the law relative to civil conditions.

Those Israelites who come into Russia to buy Russian products and export them, may receive equally commercial patents of the first guild, after an agreement has been established to that effect each time between the Ministers of Finance, of the Interior, and of Foreign Affairs. Foreign Israelites, especially those who are agents of important commercial houses, can visit the manufacturing and commercial localities known as such, in Russia, in virtue of the provisions prescribed in the regulation of passports. (Art. 1001, T. IX, of Res. of Laws, Ed. of 1890.)

REVIVAL OF THE MOHAIR TRADE.

The almost unprecedented rise in the price of mohair and mohair products, has aroused renewed interest in that lustrous material. As Bradford is, perhaps, the center of the mohair industry, buying over two-thirds of the output of the world, the thoughts of many interested have been turned in this direction. I have received inquiries from the United States suggesting that information be given that would lead to the culture of the angora or mohair goat in that country, especially in the Southern and Southwestern States, where the climate is suitable.* One correspondent writes from Texas that he has a flock of 1,000 goats, which are doing well, and that he believes it would be of great advantage to the country if the subject were more generally understood. In the last few months, immense fortunes have been made here in the mohair business. The price of the raw material has increased from 24 cents to 64 cents per pound, or more than 165 per cent; of yarn (2 fold 32s light gray Turkey mohair), from 48 cents to \$1.03 per pound, an increase of nearly 115 per cent, and of the finished product suitable for linings, dress goods, summer coatings, etc., from 17, 21, 23½, and 27 cents per yard a year ago, to about 70 per cent above these prices. One firm of manufacturers is alleged to have cleared \$5,000,000 in less than five months. Half a dozen other firms, including spinners and raw-material dealers, are reputed to have done almost as well, while merchants and all others who have been in a position to buy or sell the hair, the yarn, or the fabric have made great profits. The cause of this great furore in mohair has been the change in fashion and the return of mohair and luster fabrics to popularity last spring. Anyone who had a large quantity in stock had a fortune in his hands, as had any who, foreseeing the continued demand, had sufficient faith to keep on buying even at the advanced prices asked. It is predicted that mohairs will continue in style for another season or two, and many are shaping their course accordingly. Bradford, in the meantime, is enjoying a commercial prosperity such as it has not known since 1870-1873.

Not only has the trade in mohair products increased, but also in woollen and worsted goods and dress stuffs. The beginning of the year found the merchants of the world with practically empty shelves. There had been a

* A report upon the angora goat, with a view to its importation into the United States for breeding purposes, was printed in CONSULAR REPORTS No. 131 (July, 1883), p. 1.

great wave of depression. People were either unable to buy, or, in the face of the hard times everywhere manifest, they had economized and stopped buying. Now there is a demand for Bradford products not only in the English home trade, but in the United States, in South America, Mexico, and all the countries of Europe, Asia, and Africa. In the face of this demand, which can not be fully supplied, prices have advanced all along the line, but more particularly in mohair.

To Amos Crabtree, esq., a director of the Bradford Chamber of Commerce and a most intelligent and enterprising dealer in mohair, I am indebted for much of the appended information.

The business in mohair was commenced about fifty years ago, the raw material being imported into London and Liverpool exclusively from Asia Minor by several rich Greek firms. When the spinners wanted mohair, they had to go to London or Liverpool to buy it. But thirty years ago, one of the Bradford mohair merchants began to import it direct from Constantinople, and these direct importations have since developed so extensively that now the bulk of the mohair grown in both Asia Minor and South Africa is brought to Bradford in that way. The spinners have no occasion to go out of town to buy, as they can supply their wants from the large stocks regularly held here.

For some years after the commencement of the business, by reason of the bright, slippery nature of mohair, the spinners could not comb it by itself; they had to mix long English luster wool with it. But that difficulty has long since been overcome, and now almost anybody can comb it.

There are two sources of supply, viz, Asia Minor and South Africa. Asia Minor is the natural home of the angora goat. The country is very mountainous and covered with trees and shrubs, on which the animals chiefly feed. This kind of country appears to be much more suitable for the goats than a flat, grass country. A large portion of South Africa being of a similar nature to Asia Minor, it occurred to a few enterprising farmers of the Cape Colony, about thirty years ago, that it would be a desirable thing to get some angora goats from Turkey and try to grow mohair. At that time, the Turkish Government was willing to allow the animals to be sent out of the country, and shiploads of pure-bred angoras were brought away from time to time, until the Government became alarmed and prohibited their exportation. The business proved so successful that now the clip of Cape mohair exceeds that of Turkey. For a time, it was doubted if the Cape farmers would be able to keep up the breed and continue to send hair of the right class, but there is no doubt now that they can, and in proof of this there has just been received from South Africa a large number of prize fleeces, clipped this year, which are everything that can be desired.

The fiber requires a moist climate to successfully deal with it.

Not for fifteen years has there been such a rapid rise as the one that has just taken place. In January of this year, the price of best Turkey fleece was 29 cents per pound. It remained at that figure during February and

March. In April, it was 31 cents per pound; in May, 38 cents was paid; then, in June, it jumped in one week to 48 cents; now, it is 64 cents per pound, and is still on the rise. Notwithstanding the demand was real and not speculative, and turns out to have justified the rise, many of the spinners and merchants refused for a time to follow the upward movement, not having confidence that it had come to stay. In 1889 and 1893, there were similar moves, not, however, so great, but both these rises were quickly followed by great and sudden drops, and it was this very recent experience that caused most people to be cautious. But fashion, at present, is all for the harder and more lustrous fabrics, and it seems likely to continue for at least another season or two.

There is one point more that is worthy of attention, viz, the improvements which have taken place in machinery during the past few years. These have enabled spinners to deal with the short mohair in a way that would not have been possible fifteen or twenty years ago. Large quantities of short mohair are now successfully manipulated in Bradford and district that formerly had to be sold to the woolen people. Added to these improvements, there is the other advantage of the greater suitability of the English climate over that of other countries for the combing and spinning of mohair, and it is therefore asserted that it is a very difficult matter indeed for others to compete with Bradford.

Though it is understood that the Turkish Government prohibits the exportation of the angora goat, I am told that the prohibition is not strictly enforced, and that it would not be difficult for Southern farmers to import goats for breeding purposes, thus beginning with a fresh and pure blood.

There are a great many varieties of mohair grown in Turkey, such as Beybazar, Angora, Geredah, and Castamboul, but one feature is very prominent—it is nearly all a good length. The Turks allow the hair to remain on the animals the full twelve months; they clip only once a year, and the result is they produce a beautiful, bright fleece, the staple of which is about 8 inches in length.

Some good long hair comes from Cape Colony, but the bulk of the summer firsts is only of medium length—only 5 to 6 inches long—the reason of this lack of length being that the growers in South Africa, believing they get a greater weight, clip twice a year. The first clip is shorn in April, and is of about seven or eight months' growth. This is the longer hair, and is called the summer firsts. Toward the end of August they clip the animals a second time, and this is the short winter hair—about 2 or 3 inches long. There is no doubt that if the South African growers would allow the hair to remain on the animals a longer time, they would produce as good mohair as that which comes from Turkey. The Bradford Chamber of Commerce has taken this matter up and urged the Cape farmers to grow a full season's clip. Strangely enough, transactions of the United States have been cited to them as the reason why they should produce a long staple. It has been pointed out to them that United States buyers have purchased largely direct from

Constantinople, but have not purchased a pound from Cape Colony for the reason that the Turk shears but once a year, giving a fine, full staple, while the African farmer shears two or three times to get a greater weight, but to the detriment of his product.

The most remarkable feature in the mohair trade is the enormous increase in the production in South Africa. From nothing at all thirty years ago, it has, from its commencement at that time, increased year by year, until now the exports from the Cape are 21,000 bales of 450 pounds each per annum. There is still a considerable space of country suitable for the cultivation of angora, where the farmers have no goats, and the recent enormous rise in price is causing these farmers to turn their attention to the business, and it is reported there will be a further increase during the next two or three years.

Although the Turks are a much slower people than the people of South Africa, they have increased their production also very largely. From 1863 to 1873, about 25,000 bales were exported from Constantinople yearly. From 1873 to 1883, about 33,000 bales was the average, while from 1883 to 1893, it was about 40,000 bales. Since 1893, the exports have averaged 42,000 bales yearly. The bales from Turkey weigh 170 pounds each.

Mohair has always been considered a fickle article. When it is in demand, it suddenly rises from 10 to 30 per cent; when, on the other hand, trade is quiet, it is difficult to sell at almost any price. I annex a list of prices from 1874 to the present time, showing periods of most violent fluctuations. By referring to the list, it will be seen that up to the end of 1875, the price ruled between 73 cents and 97 cents per pound. This was the time when the fashion for ladies' dress goods ran on bright fabrics, of which "glaces" made from mohair were an important class. Soon after that time, fashion changed to soft goods made from merino wools, and although during the past twenty years several attempts have been made to introduce mohair goods, they have never been in fashion until the present time. This period from 1875 to 1895, has been a most trying one for mohair spinners and manufacturers, and the price has been considerably lower than was ever known.

Besides being used largely for dress goods in the old days, and also now again, the principal use of mohair is for the twofold yarns for braids and for plush, for which purposes it is peculiarly suitable. There is no fiber that wears so well as mohair in the form of either braid or plush. Fine mohair braids were formerly largely used for the edges of men's coats and vests, but since the sewing machine has come so generally into use, thus enabling neater edges to be made, these fine braids do not seem to be required, and that portion of the trade has been the most depressed for a number of years. When the price was so low, the article was used for a number of purposes for which it is now too dear. There is some used in the woolen trade for mantle cloths.

A large proportion of the mohair yarns spun in this district, especially two-folds, goes to Germany and France; but very little raw material is ma-

nipulated abroad, and the explanation appears to be that the climate of this country is more suitable than that of any other for the combing and spinning of mohair.

Table of prices of mohair, per pound, for twenty-three years.

Month.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
January.....	\$0.90	\$0.77	\$0.67	\$0.83	\$0.87	\$0.72	\$0.74	\$0.46	\$0.52	\$0.43
March.....		.72	.70	.94	.86	.68	.72	.42	.68	.40
April.....									.70	
May.....		.68	.74	.92	.62	.66	.54	.40		.40
July.....	.84	.68	.90		.69	.70	.66	.43	.55	.42
September.....	.83	.72	.81	.87	.72	.70	.56	.36	.56	.41
December.....	.80	.66	.81	.86	.76	.74	.46	.55	.46	.44

Month.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
January.....	\$0.41	\$0.41	\$0.38	\$0.37	\$0.30	\$0.27	\$0.25	\$0.26
March.....	.39	.41	.37	.37	.28	.29	.24	.25
May.....	.44	.39	.38	.36	.25	.28	.26	.26
July.....	.42	.41	.42	.33	.28	.28	.25½	.27
September.....	.45	.39	.41½	.32	.31		.24	.29
October.....						.27		\$0.32 10 .36
November.....								.42
December..	.40	.38	.37	.30	.28	.26	\$0.25 10 .29	.38

Month.	1890.	1891.	1892.	1893.	1894.	1895.
January.....	\$0.38	\$0.27	\$0.25	\$0.26½	\$0.29	\$0.28
February.....				.26		
March.....	.35½	.25		.30		.29
April.....		.26	\$0.24 10 .24½	.33½	.28	.30
May.....			.24½			.37
June.....	.28½			\$0.29½ 10 .36	\$0.28 10 .31	\$0.38 10 .48
July.....		.25½	.24	.38		.50
August.....						.52
September.....	.29	.25½			.31	.64
October.....			.24½ 10 .25	.36		
November.....	.28	.24½	.26		.29	
December .....	.27	.24½	.26	.31	.28	

CLAUDE MEEKER,
Consul.

BRADFORD, September 6, 1895.

AGRICULTURAL STATISTICS OF IRELAND.

From the agricultural statistics of Ireland for 1895, it will be seen that of the total acreage of 20,333,344, 4,845,724 acres, or nearly 24 per cent, are returned as “turf, bog, marsh, barren mountain land, etc.,” leaving 15,487,620 acres under tillage, being an increase, as compared with 1894, of 13,669 acres. Of this, the total extent under crops was 4,879,506 acres, being a decrease of 51,505 acres, or about 1 per cent as compared with 1894.

The extent returned as under grass is 10,280,706 acres, as against 10,214,099 acres in 1894, being an increase of 66,610 acres; the area of fallow land is given at 18,506 acres, as against 19,568 acres for 1894, or a decrease of 1,062 acres.

The following table shows the acreage under each crop in 1894 and 1895, respectively, with the increase or decrease in the latter year:

Kind.	1894.	1895.	Increase.	Decrease.
<i>Cereal crops.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Wheat.....	49,338	36,529	.....	12,809
Oats.....	1,254,837	1,216,370	.....	38,467
Barley.....	164,595	171,648	7,053	.....
Beans and pease.....	3,185	2,852	.....	333
Bere and rye.....	12,102	11,654	.....	448
Total.....	1,484,057	1,439,053	7,053	52,057
Net decrease.....	.....	.....	.....	45,004
<i>Green crops.</i>				
Potatoes.....	717,090	710,389	.....	6,701
Turnips.....	311,310	313,248	1,938	.....
Mangel-wurzels and beet roots.....	52,039	53,026	987	.....
Cabbage.....	44,506	39,701	.....	4,805
Vetches and rape.....	10,822	9,809	.....	1,013
Carrots, parsnips, and other green crops.....	27,508	25,409	.....	2,099
Total.....	1,163,275	1,151,582	.....	11,693
<i>Summary.</i>				
Cereal crops.....	1,484,057	1,439,053	.....	45,004
Green crops.....	1,163,275	1,151,582	.....	11,693
Flax.....	101,081	95,202	.....	5,897
Clover, sainfoin, and grasses.....	641,058	635,603	.....	5,455
Permanent pasture.....	541,540	1,558,066	16,526	.....
Total.....	4,931,011	4,879,506	.....	51,505

Area under each of the several crops in each year from 1891 to 1895, inclusive.

Description.	1891.	1892.	1893.	1894.	1895.
	<i>Acres</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Wheat.....	80,870	75,408	54,998	49,338	36,529
Oats.....	1,215,396	1,226,244	1,248,338	1,254,837	1,216,370
Barley.....	177,966	175,178	168,776	164,595	171,648
Bere and rye.....	13,796	13,525	13,656	12,102	11,654
Beans and pease.....	4,735	4,433	3,605	3,185	2,852
Potatoes.....	753,332	740,025	723,735	717,090	710,389
Turnips.....	300,326	300,447	302,774	311,310	313,248
Mangel-wurzels and beets.....	51,757	51,554	47,034	52,039	53,026
Cabbage.....	43,043	41,184	41,236	44,506	39,701
Vetches and rape.....	12,872	11,948	11,051	10,822	9,809
Carrots and other green crops.....	30,088	29,705	27,878	27,508	25,409
Flax.....	74,665	70,647	67,487	101,081	95,202
Clover, sainfoin, and grasses under rotation..	595,609	623,886	642,355	641,058	635,603
Permanent pasture or grass not broken up..	1,463,920	1,518,924	1,525,118	1,541,540	1,558,066
Total.....	4,818,381	4,883,108	4,878,041	4,931,011	4,879,506

It will be seen from this table that the principal decrease has been in the cereal crops and green crops, with the exception of turnips and mangel-wur-

zels, and that the decrease is partly accounted for by an increase in meadow and clover. This change in the disposition of arable land is principally owing to the increased attention that is being given to growing cattle and dairying, and to raising horses.

From returns of live stock, it appears that there has been an increase of 7,682 in the number of horses and mules as compared with 1894. There has been a gradual increase in the number of horses for some years past, the number in 1886 being 578,299, and for the present year 660,212. Of other live stock, there has been a decrease of 33,798 cattle, 190,325 sheep, and 50,870 pigs, with an increase of 189,895 in poultry.

The long continued drought of May and June greatly injured most of the crops, but recent rains are reported to have been of great benefit, especially in the case of the cereals and turnips and mangel-wurzels. In many cases where an almost total failure was feared, there is now a fair prospect of an average crop. An average yield of wheat is expected from all parts of the country, though, generally speaking, it will be short in the stalk and light. The outlook for the oat crop is not so hopeful. The yield in the province of Leinster is reported to be much below the average, and in the other parts of Ireland it is expected to fall below an average crop. It is also short in the stalk and light. Barley seems to promise an average yield, and the same may be said of bere and rye. There is now a promise of an abundant crop of potatoes from all parts of the country with the exception of the marshes and bogs where the frost interfered with their growth. However, the crop is in most places so abundant that it will be greatly above the average for the whole country. Turnips do not promise well, being much below the average in every part of Ireland, and in many places a complete failure. Mangel-wurzels and beets seem to be only about the average, perhaps slightly below.

Owing to the drought in the early part of the year, the flax crop seems to be in bad condition and much below the average. While the late rains may benefit the crop in some districts, the general opinion is that the rain came too late to be of much assistance.

In connection with flax, I may mention that the number of scutching mills in 1895 is: In Ulster, 938; Leinster, 7; Munster, 5; and Connaught, 6; making a total of 956 for Ireland.

DUBLIN, *September 16, 1895.*

A. DONN PIATT,
Vice and Deputy Consul.

AGRICULTURAL STATISTICS OF VICTORIA.

The agricultural statistics for the year ending March 1, 1895, with the exception of hops, tobacco, vines, flax, and hemp, have been issued by the assistant government statist of the Colony of Victoria. Some matters of interest are dealt with. The figures show that the extent of land under tillage was 2,980,299 acres, as against 3,019,009 in 1893-94, a reduction of

38,710 acres. The area under wheat was 1,373,668 acres, as against 1,469,359, a falling off of 95,691 acres. There were important increases, as follows: Oats, 47,540 acres; malting barley, 46,431 acres; potatoes, 15,474 acres; hay, 80,355 acres. The yields in the chief lines were as follows:

Description.	1893-94.	1894-95.
Wheat.....bushels...	15,255,200	11,445,878
Oats.....do.....	4,951,371	5,633,286
Malting barley.....do.....	784,500	1,337,643
Pease and beans.....do.....	1,050,082	716,193
Potatoes.....tons...	144,708	196,706
Onions.....do.....	10,199	17,377
Hay.....do.....	503,355	621,547

The following table shows the area and yield of wheat and oats:

Counties.	Wheat.		Oats.	
	Area.	Yield.	Area.	Yield.
	<i>Acres.</i>	<i>Bushels.</i>	<i>Acres.</i>	<i>Bushels.</i>
Anglesey.....	186	2,410	698	18,365
Benambra.....	1,111	15,963	1,123	27,304
Bendigo.....	48,391	574,707	24,811	667,204
Bogong.....	17,522	90,091	4,684	73,362
Borong.....	363,627	2,896,422	21,308	351,218
Bourke.....	394	6,711	5,447	132,222
Buln Buln.....	99	1,145	2,468	59,552
Croajingolong.....	53	950	94	1,980
Dalhousie.....	905	15,251	11,518	278,027
Dargo.....	14	420	15	134
Delatite.....	3,594	31,367	6,607	110,729
Dundas.....	313	4,109	1,659	31,957
Evelyn.....	8	167	148	3,213
Foilett.....	295	3,042	1,023	20,338
Gladstone.....	57,567	524,146	27,323	587,660
Grant.....	539	8,516	4,885	133,045
Grenville.....	179	2,555	2,709	57,775
Gunbower.....	44,237	456,211	11,673	254,520
Hampden.....	11	190	473	10,070
Heytesbury.....	8	232	820	21,859
Kara Kara.....	77,782	676,503	29,835	550,979
Karkarooc.....	194,821	1,584,306	827	15,174
Lowan.....	200,362	1,189,233	20,698	282,317
Moir.....	157,586	1,319,089	32,985	744,043
Mornington.....	23	279	177	3,721
Normanby.....	258	3,550	2,248	43,013
Polworth.....	18	200	448	9,765
Ripon.....	3,158	38,778	4,959	92,506
Rodney.....	50,778	533,750	21,290	509,653
Talbot.....	1,619	23,590	13,624	331,014
Tambo.....	10	97	14	520
Tanjil.....	419	3,906	979	21,063
Tatchera.....	144,587	1,421,395	5,568	119,038
Villiers.....	266	5,596	2,954	65,267
Weeah.....	898	10,724	.....	.....
Wonnangatta.....	30	285	352	4,629
Total.....	1,373,668	11,445,878	266,444	5,633,286

The average produce per acre of the three principal crops in each county during the past two seasons was as follows:

Counties.	Wheat.		Oats.		Hay.	
	1894.	1895.	1894.	1895.	1894.	1895.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Tons.</i>	<i>Tons.</i>
Anglesey	15.97	12.96	27.61	26.31	1.71	1.43
Benambra	14.87	14.37	23.64	24.31	1.28	1.2
Bendigo	14.81	11.88	24.54	26.89	0.99	1.24
Bogong.....	8.79	5.14	19.87	15.66	0.98	0.72
Borong.....	10.53	7.97	22.89	16.48	0.99	1
Bourke.....	19.43	17.03	24.05	24.27	1.42	1.64
Buln Buln	19.26	11.57	27.88	24.13	1.83	1.56
Croajingolong.....	16.86	17.92	27.48	21.06	1.3	1.23
Dalhousie.....	17.5	16.85	23.65	24.14	1.54	1.45
Dargo.....	24.71	30	31.47	8.93	1.33	1.25
Delatite	9.36	8.73	23.03	16.76	1.08	0.98
Dundas.....	9.58	13.13	20.2	19.26	1.21	1.22
Evelyn.....	19.57	20.88	23.05	21.71	1.61	1.43
Follett.....	8.1	10.31	20.66	19.88	1.24	1.11
Gladstone.....	11.13	9.1	21.27	21.51	0.92	1.15
Grant.....	16.38	15.78	29.36	27.24	1.81	1.76
Grenville	15.80	14.27	22.34	21.33	1.31	1.22
Gunbower	8.9	10.31	18.93	21.8	0.74	1.13
Hampden.....	18.82	17.27	27.83	21.29	1.89	1.57
Heytesbury.....	16.4	23	27.29	26.66	1.54	1.67
Kara Kara.....	10.7	8.7	18.94	18.47	0.98	1.1
Karkaroc.....	10.43	8.13	12.92	18.35	0.93	0.93
Lowan.....	6.09	5.94	13.3	13.61	0.68	0.85
Moir	12.02	8.27	25.15	22.56	0.99	1.08
Mornington.....	11.21	12.13	23.17	21.02	1.34	1.24
Normanby.....	9.31	13.76	22.38	19.13	1.27	1.17
Polworth.....	17.74	11.11	22.36	21.8	2.08	1.75
Ripon	11.66	12.28	18.66	18.65	1.38	1.5
Rodney.....	15.17	10.51	24.74	23.94	1.15	1.3
Talbot.....	14.11	14.57	24.98	24.3	1.6	1.57
Tambo.....	6.69	9.7	20.07	37.14	1.25	1.28
Tanjil	17.27	9.32	21.78	21.51	1.59	1.23
Tatchera.....	8.91	9.83	17.12	21.39	0.87	1
Villiers.....	21.3	21.04	22.75	22.09	1.76	1.8
Weeah.....	14.33	11.94	.....	.....	2	1.48
Wonnangatta.....	10.08	9.5	19.39	13.15	1.71	1.55
Total.....	10.38	8.33	22.62	21.14	1.22	1.26

DANIEL W. MARATTA,
Consul-General.

MELBOURNE, *August 10, 1895.*

CATTLE EXPORTS OF NEW SOUTH WALES AND QUEENS-
LAND.

As the people of the United States supply the chief demand for live stock imported into the European market, it must be of deep interest to them to know something of the nature and magnitude of the competition in that trade from whatever source it may come. Australia is essentially a pastoral

country, and from the very nature of the soil and climate, stock and wool growing will probably always be the chief industries. It may not be amiss to repeat here that Australasia is about as large as the United States (excluding Alaska), and while there is but a comparatively limited area suitable for agriculture, by reason of a lack of sufficient rainfall and general sterility, the grasses are very nutritious and the seasons so equable as to suggest stock raising on the most extensive scale.

Sydney is the point of export for the live-stock trade of New South Wales and Queensland. New South Wales has an area of 310,700 square miles, or about six times the area of Iowa, and Queensland has 668,497 square miles, or enough to make thirteen Iowas. In both colonies, there is probably not as much of what we Americans would regard as good agricultural land as would make half of Iowa, but fully enough pastoral land to make ten Iowas, so there are vast possibilities here for pastoral industries.

Naturally, there are vast areas in both of these colonies with so scant a rainfall and so insufficient a water supply as to greatly limit the live-stock operations, but successful experiments in artesian boring have vastly extended the possibilities of this industry. In both colonies, the governments have taken a hand in these great enterprises, and the future looks very encouraging. In New South Wales, the Government began this work in 1884, since which time there has been a large number of successful bores, both by the Government and by private persons. The "Coawburrah," in New South Wales, has a daily flow of 5,000,000 gallons, and I think in the colony there is an aggregate of 40,000,000 gallons per day.

In Queensland, the Government has made, I think, some twenty-five bores to an average of 1,730 feet, furnishing 300,000 gallons per day at the Charleville well.

As land here is very cheap, it is held in large tracts, and as there are practically no winters, so that cattle fatten the year round on natural grasses, it will be seen how cheaply cattle can be raised and fattened for market. In New South Wales, one-half of the alienated lands, or 21,000,000 acres, are held by 677 persons with an average holding of 31,000 acres; but 23 per cent of the 198,848,000 acres are alienated, while 66 per cent are leased. The leaseholds are of enormous areas, or tracts. All but 10 per cent of the lands of New South Wales are either alienated or leased.

Of the 427,800,000 acres in Queensland, but 12,500,000 acres are alienated, and 280,500,000 acres are leased. The leaseholds here, too, are in large tracts, some aggregating fully 1,000,000 acres, and portions of this cost no more than a farthing (one-half of one cent) per acre, for annual rental. Twenty-two per cent of Queensland lands are neither sold nor leased, but I imagine they are mostly worthless.

At present prices, cattle can be raised in Queensland at a profit for their hides alone. According to what seems to be reliable information, there are near 7,000,000 head of horned cattle in Queensland and 2,500,000 in New South Wales. The people of the United States have about five-

sevenths of one head of cattle per capita; the people of New South Wales have about two head, and the people of Queensland nearly twenty head per capita.

This brings us down to the actual business of export. For several years there has been considerable export trade in frozen and preserved meats, but the greater desirability of meats slaughtered near the distributing markets determined the enterprising people of this country to participate in the live-stock trade of Europe.

Recently, I was invited to inspect the cargo of the *Southern Cross*, which had on board 520 head of cattle for the London market, via Cape Horn.

The steamer was well fitted up for the purpose, and this was the first full cargo of live stock ever shipped from Australia. These cattle were of a good class. They were from Queensland, of a high grade from good crosses, chiefly Shorthorn and Devon, with an average weight of about 1,600 pounds, and average age of 5 years.

The following table shows a complete history of the shipments from this point, but I doubt if the experimental stage is passed:

Steamer.	Date of sailing.	Number of head.	Quality.	Deaths.	Gross realization.
					£. s. d.
Maroi King.....	Sept. 12, 1894	20	Indifferent.....	1	13 14 0
Port Pirie.....	Oct. 23, 1894	18	Very good.....	1	21 10 0
Echuca	Jan. 19, 1895	33	Good.....	2	21 12 0
Maroi King.....	Mar. 2, 1895	30	.....	2	18 0 0
Echuca	Jan. 19, 1895	7	Extra good and weighty...	4	28 0 0
Gulf of Lion.....	Mar. 21, 1895	77	No advice.....	(*)	(*)
Gulf of Bothnia.....	Mar. 30, 1895	120	Good.....	†47	‡19 17 6
Culgoa	Mar. 7, 1895	5	.....	.....	15 10 0
Buteshin.....	Apr. 3, 1895	26	No advice.....	5	21 10 0
Port Victor.....	Apr. 11, 1895	72	.....do.....	(*)	(*)
Celtic King.....	Apr. 17, 1895	18	.....	.....	21 0 0
Port Chalmers.....	Apr. 18, 1895	80	Very good.....	6	21 0 0
Nairnshin.....	Apr. 21, 1895	101	Indifferent	9	18 0 0
Gulf of Genoa.....	Apr. 30, 1895	50	No advice.....	(*)	(*)
Warrigal	July 6, 1895	20	.....	.....	.....
Perthshin	Apr. 30, 1895	130	.....	.....	.....
Gulf of Siam.....	June 7, 1895	71	Fair to prime.....	.....	.....
Southern Cross.....	July 9, 1895	550	.....do.....	.....	.....
Urmston Grange.....	Aug. 5, 1895	230	.....	.....	.....

* No advice.

† Fevered in feet before shipment, to which the heavy mortality was due.

‡ Net.

As to care on board, the following is from the contract relating to the shipment on the *Southern Cross*:

Each bullock to be watered three times a day, at 5 o'clock in the morning, 12 o'clock noon, and 5 in the evening, and to be fed at 6 o'clock in the morning and 4 o'clock in the afternoon, with 3 pounds of maize and 2 pounds of bran mixed, and 10 pounds of lucern hay. The stalls are to be cleaned daily, and fresh straw placed on the decks, to be daily inspected by the captain, and entirely under his jurisdiction.

From careful inquiry, and by a series of written questions submitted to most reliable persons, I have formed the following conclusions:

The annual "cattle crop" of New South Wales is about 400,000, with an annual consumption in Sydney of 110,000 head. The Queensland cattle crop is near 1,000,000 head, with a consumption of, say, 50,000 head.

Most of the cattle so far exported, were fattened in Queensland and brought to Sydney by rail.

Fatted cattle here in Sydney, the point of export for bullocks averaging, say, 1,600 pounds, are worth about £21 (\$102.18) per head—sold by the pound net or estimated dressed weight.

The freight per head, including fittings and free storage for food, is £8 (\$38.93).

They are shipped both via Cape Horn and Suez; time, from forty-five to sixty days.

With a fair voyage and good care, the stock is supposed to gain in weight about 30 pounds per head on the voyage.

The food is lucern, bran, and crushed maize.

The cattle are 4 years old and upward, mostly a cross of Shorthorn and Devon, and the average weight of those shipped was about 850 pounds, dressed—1,600 pounds gross.

Cattle do not shrink when taken off pasture and put on prescribed shipping food.

The veterinary surgeon inspects all cattle on board here, and, if healthy, gives a clean certificate. All cattle have to be killed within a certain time after landing at port of destination.

So far, there is no cooperative movement for this branch of the cattle trade, but as there is a growing necessity, as well as a desire to increase exports, the future magnitude of the trade can not even be guessed at the present time.

However, as prices are very sensitive to competition, and as all must sell at the figures offered by competitors, the importance of this new candidate for public attention is worthy of our consideration.

Of course, the people of the United States have an advantage of from 9,000 to 12,000 miles in distance, but with the much cheaper production or original purchase price, and the lowering of freights, if the trade becomes well established and extensive, the shorter distance from the United States will hardly offset the advantage of the Australian competitors. But as yet there is an "if" in all these calculations.

The Australian pastures are as far from the centers of meat consumption as it is possible to get—so far in fact that winds and currents determine the course of a ship, whether it go east or west, yet with a successful trade that would justify specially fitted ships and regular cargoes, fine, well-fattened cattle of an average weight of 1,600 pounds could be put into the London market from Australia more cheaply than from any other part of the globe.

After all, it seems novel to see 500 head of fine cattle loaded into a ship as they would be led into sheds in America, to be taken 17,000 miles—to the opposite side of the globe—for a market, with a perfect confidence that they will be better when landed than when shipped.

GEO. W. BELL,
Consul.

SYDNEY, N. S. W., *September 1, 1895.*

GRAIN CROPS OF EUROPE.

The report of the thirty-second annual international grain fair of Vienna relative to the grain crop of 1895 has just been published, and as this report has the reputation of being trustworthy, I forward the following extracts to the Department. The wheat, rye, barley, and oat crops of Europe are below the average, and the wheat crop of India is about 6,000,000 metric centners (22,046,000 bushels) less than that of the preceding year. Canada, on the other hand, shows an increase of 6,000,000 metric centners in the quantity of wheat produced. Corn is exceedingly promising, and it is expected that the yield will be one-half again as large this year as it has been on the average during the last ten years.

In Russia, both the wheat and rye crops are above the average in most of the provinces.

The following table compares the harvest of Austria-Hungary for 1895 with that of 1894 in metrical centners of 220.46 pounds each :

Description.	Austria.		Hungary.		Whole Empire.	
	1895.	1894.	1895.	1894.	1895.	1894.
	<i>Met. cent.</i>	<i>Met. cent.</i>	<i>Met. cent.</i>	<i>Met. cent.</i>	<i>Met. cent.</i>	<i>Met. cent.</i>
Wheat.	12,400,000	12,800,000	41,500,000	41,900,000	53,800,000	54,700,000
Rye.....	16,600,000	19,400,000	11,300,000	16,300,000	27,900,000	35,700,000
Barley.....	11,000,000	13,600,000	10,000,000	13,000,000	21,000,000	26,600,000
Oats.....	16,300,000	17,500,000	9,000,000	11,000,000	25,300,000	28,500,000
Total.....	56,300,000	63,300,000	71,800,000	82,200,000	128,000,000	145,500,000

Not only is the wheat crop less in quantity in this country, but it is poor in quality, on account of unfavorable weather in the early part of August.

The report does not anticipate a decrease in the total quantity of wheat produced, as the falling off in the United States and India will be counter-balanced by increases in other countries, especially Canada and Russia.

In 1894, the balance of trade was not as favorable to Austria-Hungary as in former years, on account of the scarcity of fodder; this year it will not be necessary to import fodder, and in spite of barley, which is one of the principal exports, being below the usual standard as to quality, it is anticipated that the balance of trade will be normal in 1895.

The prospects of the grain crop of 1895 are summed up as follows:

Denmark.—Rye is already cut, but only a fair quantity has been obtained on account of heavy rains. It is expected that there will be a yield of 25 per cent of the normal crop this year, while in 1894, 95 per cent was obtained. Wheat is not yet harvested, and the yield depends largely on the weather. It is expected that barley and rye will yield about 100 per cent—about the same amount as was obtained the previous year.

Sweden.—If dry weather sets in, it is expected that wheat will yield 100 per cent against 95 per cent in 1894; rye, 95 per cent against 85 per cent; barley, 80 per cent against 105 per cent; oats, 70 per cent against 105 per cent.

Norway.—There is every prospect of a good harvest, and it is thought that rye, barley, and oats will yield 100 per cent.

Switzerland.—Wheat promises to be medium in quantity, but below the average in quality. It is estimated that wheat will be 90 per cent of normal; rye, 80 per cent; and oats, 100 per cent.

Holland.—Wheat and oats are satisfactory, but rye and barley have suffered through rain. It is estimated that wheat will be 95 per cent; rye, 100 per cent; barley, 95 per cent; and oats, 105 per cent.

Belgium.—Wheat is not of as good quality as usual, (quantity, 100 per cent); rye, not as good quality as usual, (quantity, 100 to 110 per cent); barley, very good (quantity, 115 to 120 per cent); oats, good (quantity, 100 per cent).

France.—Wheat will vary in quality; in quantity, it will be about 98 per cent. As there is not much of the old crop left, it is expected that the import will be at least 15,000,000 hectoliters (42,570,000 bushels). Rye is estimated at 105 per cent; oats at 95 per cent.

Great Britain and Ireland.—The wheat crop is very poor and will probably be very much less in quantity than in the preceding year. The weather was very bad during the time for sowing, and many farmers planted less wheat than usual. It is not anticipated that more than from 24 to 26 bushels will be produced per acre, so that the total crop will be 5,100,000 to 5,500,000 quarters (47,600,000 to 51,333,000 bushels). Barley is better than wheat, but the quality is poor on account of rain. A harvest is expected in quantity of: Wheat, 70 to 75 per cent; barley, 80 to 85 per cent; oats, 80 per cent; hay, 80 per cent; potatoes, 100 per cent. England will need at least 25,000,000 quarters (233,333,000 bushels) of wheat.

Italy.—Wheat is fair in quality, but about 20 per cent less in quantity than last year. Corn is good and about the same.

Servia.—About 225,000 hectares* are planted with wheat, and the grain is in good condition. About 50,000 acres are planted with rye and about 60,000 with oats.

Roumania.—The quality of wheat is good, and quantity, 100 to 120 per cent; rye is also good, quantity, 110 to 112 per cent; oats are only fair, quantity, 85 to 90 per cent.

* 1 hectare=2.471 acres.

Bulgaria.—The Bulgarian harvest will be above the average, and it is expected that from 20 to 25 per cent more wheat, from 25 to 30 per cent more rye, and about 50 per cent more barley will be harvested than in the previous year.

Russia.—Winter wheat promises a yield above the average; summer wheat has suffered in some of the provinces from drought, but promises, on the whole, a fair crop. The rye crop, which has also suffered in many provinces, will be up to the average.

India.—There will be harvested this year in India 6,278,000 tons of wheat, or about 500,000 tons less than the preceding year and 600,000 tons less than during an average year.

Egypt.—Of wheat, 3,800,000 metric centners (13,962,466 bushels) have been harvested, and as 3,000,000 metric centners will be sufficient for home consumption, there will be an export of about 800,000 metric centners (2,939,466 bushels). Corn is decidedly better than in 1894, and it is estimated that 9,200,000 tons will be harvested.

MAX JUDD,
Consul-General.

VIENNA, *August 30, 1895.*

NEW RAILROAD IN SYRIA.

The new railway from Beirut to Damascus was opened for passengers and general traffic on the 3d of August, and is now in regular operation with daily schedules both from Beirut and Damascus. The Hauran branch of the railway, which was opened last spring, is also in regular operation. This branch is expected to bring to Damascus and Beirut a large share of the immense wheat crop of the great Hauran district, and the entire railroad service will add largely to the trade of this city and afford special and long-needed facilities for tourists and travelers in general.

As stated in my special reports on railways and roadway in Syria under date of June 1, 1894, (printed in Special Consular Reports, "Highways of Commerce"), the French company which owns the famous old Damascus (macadamized) road, owns or is chiefly interested in the new railway, and the daily diligences of the former time were discontinued when the new train service was inaugurated. The improved and more expeditious service will be found of great benefit and comfort to the large number of tourists who make the journey to and from Damascus in the spring season.

In the course of a visit to the United States consular agency at Damascus last week, I noted that the new roadway is well built and strongly ballasted with rock its entire length of 146.78 kilometers.* Whether its steep grades and numerous embankments can withstand the mountain torrents of the rainy season remains to be seen during the approaching winter, but, in

* 1 kilometer = 0.62137 mile.

any event, the roadbed will be well settled and repaired before the opening of the next tourist season. European cars are employed, and the service has already been so taxed by the surprising number of applicants for tickets that extra cars have already been ordered from France. The company is under French management entirely, and French engineers had charge of the work of construction.

The special importance attaching to this report may be summed up in the fact that this is the first railway opened in Syria, and its popularity is an augury of its success and of further progress on the same line. It is hoped that it will bring back to Beirut in merchandise from the interior and for export the prosperity which has of late been waning by reason of the high charges of the new port company, driving to cheaper and neighboring ports like Haifa, Acca, Tripoli, Alexandretta, and Mersine the great bulk of goods formerly imported into this country through the port of Beirut.

THOMAS R. GIBSON,
Consul.

BEIRUT, *August 27, 1895.*

COMMERCIAL MISSIONS TO EASTERN ASIA.

The question whether the commercial interests of the United States can gain and control a fair share of the trade exchange of the transpacific Asiatic countries, is at present a most important one. With that fact in view, and with absolute confidence that our merchants and shippers are equal to the opportunity if they proceed promptly and "keep at it," I make this brief report on a certain phase of the commercial situation in eastern Asia, which has its own warnings and permits of obvious conclusions.

I refer, in particular, to the great and direct interest being taken by the chambers of commerce of the leading manufacturing and exporting cities of England, France, and Germany, in the newer field opened up, as it were, and brought into general notice by the late war between China and Japan. Not only are they discussing these markets, but they are taking practical steps to become thoroughly acquainted with the particulars and features of demand and supply, and with all the conditions of development. Some of these chambers, not satisfied with the usual methods of securing information, are sending out special commissions to China, Japan, and neighboring countries.

The one which is now arousing the most discussion in this part of the world, and the one to which I make specific reference, is the commercial mission to China, organized and sent out by the Lyons (France) Chamber of Commerce, and officially recognized and heartily approved by the French Ministries of Foreign Affairs and Commerce. The Lyons Chamber of Commerce has provided funds to pay the expenses of the mission for a period of over two years. That the members may be both capable and energetic,

young men are chosen who have graduated with credit from the best commercial schools and have already been taught the advantages and necessities of building up foreign trade.

The field of the mission will reach from Shanghai, on the central coast of China, to the provinces bordering on Siam and French Cochin-China on the south. Starting at Shanghai, the mission will proceed up the Yangste-Kiang as far as Chung-King, or approximately 1,500 miles into the interior of the Chinese Empire. With that point as the basis of operations, expeditions will be sent out to report on the extensive and thickly populated provinces of Hunau, Si-Chuen, and Kwei-Chow. None of these are less in size than the State of Illinois, and their population no one positively knows, although that of the three combined must be 50,000,000. A special study will also be made of the rich province of Yun-nan, which borders on the French possessions of Tong-King. It is understood that the mission will not only report on the possible markets, but on the ways and means of development and the most feasible routes by land and water.

This, then, is one tangible illustration of the supreme efforts being made by European nations to control the trade of eastern Asia. Commercial centers in England and Germany are planning, or have already arranged, to do the same thing, though, perhaps, in other sections, as is shown by preparations being made in advance in China, Japan, Siam, and Korea to receive these trade representatives and facilitate their labors.

Whether it would be deemed advisable for the chambers of commerce of certain cities of the United States to adopt similar measures, I will not here discuss, beyond urging the importance of gaining a firm hold on the trade exchange of eastern Asia before it is too late.

In conclusion, I can not do better than quote part of a letter sent out by the Lyons Chamber of Commerce:

It is beyond question that the recent events of the war between China and Japan must lead to an evolution in the policy of the Celestial Empire, more especially as regards the facilities and commercial advantages to be conceded to Europeans. At a time when the great western powers are about to obtain a greater freedom to penetrate into the interior of the country, and will possibly be enabled to install commercial and industrial establishments, it has struck us that it would be materially conducive to the commerce and manufactures of our district that a body of young men, possessed of adequate technical training, should be instructed to investigate on the spot the resources and commercial riches to be turned to profitable account.

JOHN BARRETT,
Minister and Consul-General.

BANGKOK, *August 1, 1895.*

NOTES.

Activity in the German Iron and Steel Trade.—Consul Wamer, of Cologne, writes to the Department, September 19, 1895:

The trade in iron and steel in Germany has resumed an extraordinarily active condition, which has been partly brought about by the efforts of the various works to form combinations for regulating the sales. Fearing a considerable advance in the prices therefrom, the purchasers have lately been giving large orders. The improvement, aided by foreign orders, had, however, begun to show itself even before the question of a combination of the works had been considered. Considerable purchases of half manufactures and wire have recently been made at increased prices for foreign markets. America has again commenced to give orders in the Siegerland for spiegel iron, which was so largely imported years ago. The determined attitude taken by the larger works to considerably advance the price of rolled iron, has produced such activity among the inland buyers that the works have contracted at high prices for the sale of the whole of their output up to the end of 1895. The present price paid for Thomas' raw iron at works is 48 marks (\$11.45) per 1,000 kilograms (2,204.6 pounds). This stimulus has not only manifested itself in the iron and steel trades, but also in all other industries in Germany to a greater or less degree, and there is every indication that this improvement will continue. The foreign demand for German manufactures is again very active, especially in America. It may be well to mention that the Germans leave nothing undone to push their trade in foreign markets. Their success is largely due to their custom of sending out their own people to introduce their goods, whereas Americans, as a rule, trust simply to advertising circulars.

Moselle Vintage of 1895.—Vice-Commercial Agent Murphy writes from Luxemburg, October 2:

The Luxemburg newspaper, *L'Independance Luxembourgeoise*, published on September 14, has the following item:

"The wine growers of the Grand Duchy of Luxemburg are in despair. The year 1893, with its excellent vintage, has been followed by bad years—1894 was unsatisfactory, but 1895 is worse. This year the wine produced will not pay the cost of cultivation. The quality will not be bad, but this will not materially diminish the loss resulting from the smallness of the quantity. The situation is the same all along the Moselle."

Before reporting these facts to the Department, I thought it wiser to obtain further information from wine experts who are directly interested in the Moselle vintage. I therefore wrote to Messrs. Bodinet Frères, of this city, from whom I have just received the following reply:

"LUXEMBURG, October 1, 1895.

"MR. GEORGE H. MURPHY,

"United States Consul, Luxemburg.

"In answer to your favor of yesterday, we inform you most politely that the statements of the *Independance* relative to Luxemburg wines are correct. The yield of grapes this year is small. Moreover, the country about Remich suffered from frosts. On the lower Moselle (from Trier to Coblenz), a leaf disease (*Peronospora*) did much damage this year. This disease destroys the leaves prematurely. Those vineyards in which the affected vines were

sprinkled promptly and frequently with a solution of copper vitrol, have luxuriant foliage and will probably yield good wine. As long ago as the beginning of August, the leaves had withered on vines which were not sprinkled with the solution mentioned. There is reason to fear that this disease can influence the quality of the wine.

"In general, on the lower Moselle, from one-fourth to one-half of an average vintage is expected, the wine being of medium quality.

"The exact result of this year's vintage can not be ascertained until January, 1896, when the first drawing off of the wine will take place.

"Most respectfully,

"BODINET FRÈRES."

Thinking that, in view of the large importation of Moselle wines into the United States this matter may be of some interest, I have the honor to report the above facts.

French Demand for American Woods.—Consul Germain, of Zurich, writes September 25, 1895 :

I have the honor to inform you that my report on "Swiss Market for American Woods," printed in CONSULAR REPORTS No. 175 (April, 1895), pages 509–515, has been copied and published by several French and German trade journals and thus circulated among interested European parties in that line. I am in receipt this day of a letter, which I inclose, and, translated, reads about as follows :

"MAUBEUGE, NORD, FRANCE, *September 23, 1895.*

"MR. EUGENE GERMAIN,

"United States Consul, Zurich, Switzerland.

"We know that you have made a special and very complete study of the question of American woods. Would it please you to cause useful information to be given us to facilitate our wood importations? As the first important point we can inform you that our firm can, if need be, furnish a guaranty of 1,000,000 francs (\$200,000); this is said to indicate to exporters that they can be at full ease as regards our solvency or responsibility.

"Thanking you in advance, etc., we remain,

"LEGRAND & JEANNESSON."

This letter, if given publicity, would, I believe, result in business to some of our wood exporters.

Exports of Cuban Sugar.—Consul-General Williams writes from Habana, October 9, 1895 :

The third quarterly statement of the production and exports of Cuban sugars of 1894 to 1895 (compiled by Mr. Joaquin Guma) to the 30th of September last, shows to that date that the Island had marketed its present crop in the following ratios : United States, 712,847 tons, or 92.53 per cent ; Spain, 26,296 tons, or 3.41 per cent ; Canada, 25,556 tons, or 3.32 per cent ; Great Britain, 5,674 tons, or 0.74 per cent ; total, 770,373 tons.

Unusual Flood of the Nile.—Vice and Deputy Consul-General Washington writes from Cairo, September 11, 1895 :

Referring to my dispatch of August 5, last, stating an unusual Nile flood, I have the honor to inform the Department that the situation has become sufficiently grave for the Egyptian Government to apply the provisions of the decree of 1887, under which all the inhabitants

may be called upon to serve in guarding and watching the river banks. A circular to that effect has been issued by the Ministry of the Interior to the moodeers, the governors of the provinces. This force will be in addition to the guards already on duty living in temporary reed huts built on the dikes at intervals of about 50 yards. The nilometer at Cairo registers the great height of 53 feet 6 inches, and a further rise is anticipated from reports of the river at Wady Halfa.

United States Capital in Santo Domingo.—Consul Grimke writes from Santo Domingo, September 22, 1895 :

Information has been received in this city from Paris of the transfer, on the 9th instant, of the title to the Banco National de Santo Domingo, capital 4,000,000 francs, from the French company which organized and has heretofore operated it, to the San Domingo Improvement Company, an American corporation, with its central office in New York city.

Lemon Crop of Palermo.—Consul Seymour writes from Palermo, Italy, October 2, 1895 :

The lemon crop this year in this consular district is an exceedingly large one, being estimated as twice that of the preceding year. The fruit, however, is not of as good quality as it was last year, which is due to the long continued absence of rain and also to the small insects or lice that have become so common. Some new fruit is being shipped already, but it will not be before the 15th of October that the shipment of new fruit will become general. It is early yet to judge as to oranges, but it is improbable that they will be as abundant as they were last year, which fact, however, would not signify that there would be a scarcity nor even that there would not be a sufficiency to supply the drafts made on this district. The average annual production of oranges and lemons in Italy is 10,000,000 boxes. Only 4,000,000 boxes (3,000,000 of which go to the United States) are exported. Large quantities of fruit are not exported for want of a market.

Depression in the Brimstone Industry.—Consul Seymour writes from Palermo, October 2, 1895 :

On August 31, 1895, the stock of brimstone on hand in Sicily amounted to 2,280,870 cantars, against 2,033,000 cantars at the same time last year. Shipments to the United States, as well as to other foreign countries, have been less this year than they were last year. The price is very low, causing the closing of some mines and a great reduction of wages in all those that are still open, which, in turn, has caused general poverty among the people of the mining districts.

Diversion of Hawaiian Trade from San Francisco to New York.*—Under date of August 16, 1895, Consul-General Mills writes from Honolulu, Hawaiian Islands :

During the six months ending June 30, 1894, the total exports from Honolulu to the United States were invoiced at \$5,001,538.58. For the corresponding period of this year, merchandise valued at \$4,949,916.27 was shipped from this port to the United States, a de-

* See CONSULAR REPORTS No. 176 (May, 1895), p. 169.

crease of \$51,622.31. Until this year, all the goods invoiced at this office were consigned to San Francisco. During the six months ending June 30 last, out of the \$4,949,916.27 worth of goods exported, \$1,132,341.58 worth of sugar went to New York by way of Cape Horn, leaving the exports from this port to San Francisco for the six months last given \$3,817,574.69, as against \$5,001,538.58 for the corresponding period of 1894.

The shipments to New York were all sugar, consigned to the American Sugar Refining Company, of New York, by Messrs. W. G. Irwin & Co., of this place, the agents of the Western Sugar Refining Company. The vessels carrying this sugar to New York were all of large tonnage, and carried cargoes as follows: *Kenilmorth*, \$200,423.40; *Charmer*, \$149,175.10; *Oakes*, \$174,095.43; *Troop*, \$130,951.12; *Helen Brewer*, \$146,297.18; *Tillie E. Starbuck*, \$176,449.75; *Manuel Llaguna*, \$154,949.60; total \$1,132,341.58.

In consequence of this diversion of trade from San Francisco, the number of American vessels leaving this port in ballast shows a large increase over the corresponding period of 1894. During the six months ending June 30 of that year eight vessels cleared from this port in ballast, while for the corresponding period in 1895, twenty-two vessels were unable to obtain cargoes—an excess of fourteen over the period first named.

The vessels leaving here in ballast came mostly from Puget Sound, with lumber, and Newcastle, N. S. W., with coal. They have relied heretofore upon obtaining sugar here for San Francisco. Some of the vessels which did obtain freight (sugar) here had to wait so long and leave with such a short cargo that the voyage was practically profitless.

I have been informed by several shipmasters carrying coal from Newcastle that they will discontinue calling at this port, as it would be a profitless undertaking to bring coal here and leave for the Pacific Coast ports with empty ships.

New Railroad in New Brunswick.—Under date of September 23, 1895, Consul Whidden, of St. Stephen, N. B., transmits to the Department an extract from the St. Croix Courier of that place, which says:

After several years of talk, the St. Stephen and Milltown railway is now practically an established fact. The greater part of the grading of the road is about completed, the fencing is well along, and the laying of rails will be commenced at once. The road connects the C. P. R. and Shore Line with Milltown, and will give manufacturers and traders in the busy town above tide water an opportunity to ship and receive their goods without transshipment and without the inconvenience, delay, and expense attending the unloading of cars and truckage to which all the business men of Milltown have been subjected heretofore. It will serve as an outlet as well for the lumber mills at Milltown and Baring, from which large quantities of short lumber are shipped by rail to the States.

The railroad for the present will probably finish at the river bank. Eventually the river may be bridged to give connection with the American side, or the road may be run down the Canadian bank of the river connecting with the Calais shore by means of the bridge at present built near the cotton mill.

Consul Whidden adds:

The road will, without doubt, eventually cross the St. Croix River and connect, by way of the St. Croix and Penobscot Railroad, with the Washington County Railroad. This latter road is now under contract, and its construction is to begin at once. It is to be completed in 1896. It extends from Calais to some point on the Bar Harbor branch of the Maine Central, with a branch to Eastport. When these roads are completed, a new route will be opened over them from Bangor and points west to St. Stephen, and thence by the Shore Line Railway to St. John, N. B.

Treaty between Central American States.—Consul Little, of Tegucigalpa, under date of August 23, 1895, transmits to the Department the text and translation of a treaty between Honduras, Nicaragua, and Salvador. The Presidents of the Republics of Honduras, Nicaragua, and Salvador, with the view of establishing permanently the peace of Central America, have nominated their respective ministers of public works and foreign relations who have agreed upon the following compact:

The three Republics shall form a single political entity under the name of Greater Republic of Central America. Should the Republics of Guatemala and Costa Rica accept the present agreement, it shall be called the Republic of Central America.

The governments becoming parties to this agreement do not renounce their autonomy, and the constitutions and laws of each state shall continue in force in all that is not opposed to the stipulations of this agreement.

There shall be a Diet, whose members shall be elected by the legislatures of the Republics for the term of three years. The Diet shall be charged with the maintenance of friendly relations with other governments, and shall have power to make treaties to that end.

All treaties that may be celebrated shall expressly stipulate that any question which may arise shall, without exception, be decided by arbitration. Pending the formation of a general assembly, treaties shall be ratified by a majority of the legislatures of the Republics. Should the Diet be unable to arrange for the arbitration of any question, it shall notify the respective governments in order that the majority may determine to accept or declare war. Should a question be raised between the signatories, the Diet shall constitute itself a tribunal of arbitration to determine the difficulty. If the decision of the Diet be not accepted by one of the governments, they shall be obliged to name, by common consent, an arbitrator who shall determine the question definitely. In case an arbitrator can not be agreed upon, the Diet shall designate one from among the Presidents of the American Republics.

The respective governments bind themselves in the most formal and solemn manner to fulfill the above stipulations, or failing them, to abide by the decision of the Diet.

The Diet shall nominate the diplomatic and consular representatives, and pass upon the credentials of those accredited to the Government of the Greater Republic.

The coat of arms and the flag shall be the same as those of the old federation.

Within three years, or before, if possible, the Diet shall perfect a plan of definite union of the Republics signing, and shall submit it to a general assembly composed of twenty members from each state, elected by their respective legislatures.

The assembly shall organize when two-thirds of its members are present.

The governments signing shall each transmit a copy of this agreement to the governments of Guatemala and Costa Rica.

This agreement shall be exchanged within one month after its final ratification by the legislatures of the Republics signing, but a failure to exchange within that period shall not imply the extinction of the treaty.

The assembly ratifying this agreement shall proceed to the election of the members of the Diet, which shall begin the exercise of its functions three months after the verification of the exchange of ratifications.

Signed and sealed in triplicate at Amapala the 20th day of June, 1895.

Affairs in Nicaragua: British Indemnity, Custom-House Regulations, Railroads and Telegraph.—In dispatches to the Department of State dated August 23 and 24, Consul O'Hara, of San Juan del Norte, Nicaragua, announces the distribution of the indemnity of £15,000 paid by the Govern-

ment of Nicaragua in response to the British demand for damages to British subjects because of the Bluefields affair. The Bluefields Recorder claims that some of "the persons indemnified owe no allegiance to England." The amounts received by individuals range from £100 to £4,500, the British vice-consul, Edwin Hatch, receiving the latter amount.

Custom-House Practices at Bluefields.—Consul O'Hara says of custom-house practices at Bluefields:

The town of Bluefields is about six miles from the sea. The custom-house is at the mouth of the harbor, and all goods for Bluefields are first discharged at the custom-house dock and afterward lightered across the lagoon to Bluefields. Merchants have complained that goods have been unnecessarily detained at the custom-house when not accompanied by consular invoices. It is believed by the merchants that Dr. Talero, the inspector of customs, just appointed, will act upon the suggestions thrown out in the editorial herewith inclosed, which appeared July 27, 1895, in the Recorder, a newspaper published at Bluefields.

The editorial referred to describes various deficiencies and delays at the custom-house, and expresses the opinion that the change is intended to effect a reform.

Lasché Land Concession.—Consul O'Hara also states that the Bluefields Recorder announces the granting of a concession to Mr. J. Lasché, representing the South Dakota and Central American Trading Company, of South Dakota, for 25,000 hectares* of land at any point on the Atlantic coast of Nicaragua in alternate lots. In return, the company is to provide a steamer to ply between San Juan del Norte and Cape Gracias-a-Dios, calling at intermediate ports. Consul O'Hara adds:

It is said that Lasché is now in the United States endeavoring to interest capitalists in his project. He has been given six months within which to deposit \$10,000 as an evidence of good faith. About half way between here and Bluefields, there is a natural harbor under the lee of Monkey Point, and it is an excellent place of refuge for vessels of the deepest draft when the wind is from either the north or east. At comparatively small cost, a harbor could be made at that point not only affording complete shelter to vessels with the wind from any quarter, but permitting them to land there their cargoes without the aid of lighters, and large enough to thus accommodate many steamships and other vessels at the same time. The Rama is but a few miles south of there, and the lands along the river are rich and well adapted to the cultivation of bananas and other tropical crops. It is believed to be part of Lasché's schemes to improve this harbor, establish a town at Monkey Point, build a railway to the Rama River, and, after selling lands along the river, put a steamer on the river to carry bananas and other productions to the railway, on which they would then be transported to Monkey Point.

Consul O'Hara states, however, that Thomas F. Drew and other Americans are negotiating with the Government of Nicaragua for the privilege of improving Monkey Point.

Rama-San Ubaldo Railroad.—Concerning the Rama-San Ubaldo railroad, Mr. O'Hara says in another dispatch:

I transmit herewith extracts from the Recorder, of Bluefields, relating to the construction of the railway referred to in my dispatch of August 3, 1895.†

* 1 hectare = 2.471 acres.

† See CONSULAR REPORTS No. 181 (October, 1895), p. 242.

[Extracts from the Bluefields Recorder, July 27, 1895.]

Sunday, the 28th of July last, will ever be remembered as one of the glorious days of the Republic of Nicaragua. On that day the first sod was turned and the initiatory works of the railroad to connect the fluvial city of Rama with San Ubaldo, in the interior, were commenced at Rama in the presence of the entire population of the sister city, with an elaborate ceremonial and amid the grandest outburst of enthusiasm ever witnessed in the locality.

The ceremony was performed by Gen. Juan P. Reyes, inspector-general of the Atlantic Coast provinces, and Gen. Augustin Duarte, our sympathetic intendant-general.

* * * * *

The foreign element turned out in force on this grand occasion, and contributed in an appreciable degree to the success of the festival.

The Rama Railroad, uniting that important town with the interior one of San Ubaldo, will be about 178 miles long, and its construction will occupy two years, or thereabout. The Government has made the necessary provisions to permit of the uninterrupted execution of the work, and Gen. J. P. Reyes, who has been one of the leading spirits of this great work from its inception—one fraught with such incalculable benefits for these immense, unknown, and rich regions of Nicaragua—is a sure guaranty of its ultimate success, and he is to be congratulated on the part taken by him in this national enterprise.

* * * * *

The engineers of the road are H. G. Higley and José Garritz.

Electric Lights for Bluefields.—In another dispatch of August 23, Consul O'Hara says:

At a meeting of the municipal council of Bluefields, on the evening of August 9, Capt. John N. Sewell, late of New Orleans, but now a resident of Bluefields, submitted a proposition to supply the town with electric lights. The proposition will probably be accepted. American dealers in necessary supplies might find it to their advantage to correspond with Captain Sewell.

Telegraph Line from Acoyapa to Rama.—Consul O'Hara reports August 24:

The telegraph line between Acoyapa and Rama has been completed. The lowest bid made for the construction of a telegraph line between Bluefields and Rama is \$24,700 in Nicaragua currency, or about \$12,700 in United States currency. It is possible that some of our American constructors might find it to their advantage to correspond with the Government officials at Managua regarding the Rama-Bluefields line.

Steamships Withdrawn.—Consul O'Hara, under date of September 28, transmits to the Department a letter from Consular Agent Seat stating that the Morgan line of steamships has been withdrawn from the Bluefields trade. This withdrawal will be permanent unless greater facilities can be had in handling fruit, and some of the numerous harbor restrictions and regulations be removed.

Consul O'Hara also states that the export taxes on bananas (3 cents per bunch) shipped from Bluefields to the United States between January and July, 1895, amounted to \$35,000 Nicaraguan currency, or about \$17,500 gold.

Inundation of the Rio Grande.—Under date of September 2, Consul Gorman writes from Matamoros, Mexico:

I have the honor to submit a report on the "chubasco" storm that prevailed here on August 29, timely warning of which was given by the United States Signal Service. It destroyed

much property but no lives. The consular building escaped with slight damage; the consular office sustained no loss whatever. The sudden rainfall that has caused the Rio Grande River to overflow its banks is a threatening menace to the Government property at Fort Brown, on the opposite side of the river from this city. On a street leading to the property from the ferry above, 20 feet of the banks for some distance have already been carried away, and the administration building, 100 yards below, is seriously threatened by all such overflows. The irresistible current sweeps around close to the property in a curve, cutting the banks gradually away until now the river is sweeping under or near the building. I observe another and more serious contingency that will eventually arise—that of the river changing its course, cutting its way into a long laguna to the rear of the officers' quarters, with a narrow strip of land dividing the property from the river below. In this event the Government cemetery might be overflowed and washed away.

Manufacture of Matches in Belgium.—Consul Morris, of Ghent, writes to the Department under date of September 4, 1895:

A recent number of the bulletin of the labor bureau of France states that the following new regulations are in force in Belgium relative to the manufacture of chemical matches:

It is not sufficient in the future that the dipping plates of white phosphorous matches should be covered with hoods connecting with a strong draft chimney; a suction tube connected with a mechanical ventilation must be established on the level of the dipping plates and vessels which contain the paste. Respecting the composition of the pastes, they must not contain more than 80 per cent of white phosphorous, without counting the water; the least infringement will not be tolerated, as it is satisfactorily proven that an excellent match paste can be manufactured from this consistency.

The dryers, except the tunnels in which workmen must remain, must, after June 1, 1895, be aired by mechanical ventilators. Permanent committees exist which are to fix the amount of air. The working tables upon which white phosphorous matches are filled must likewise be ventilated so that the phosphorous vapors may be immediately drawn off to the lower part of the workshop and thrown out.

This ventilation must be such that, combined with the other causes of removal of the air in the workshops, the expulsion of air per hour and per workman in each room where white phosphorous matches are handled, shall be at least 2,119 cubic feet. The removal of air in the rooms where Swedish matches are handled, must be 1,060 cubic feet per hour and per workman, and, further, each workman must always dispose at least of 353 cubic feet of air.

Independently of a cloak room, there shall exist in each factory a room where vessels containing water and soap for the use of workmen shall be placed. The severest control will be exercised in this respect.

Workmen shall be subject to a preliminary medical examination, and afterwards to a monthly visit, the results of which shall be duly inscribed in a record book. They shall be excluded from work from the time when they may have been attacked by phosphoric necrosis, or as soon as they appear to be threatened with an attack of this disease.

New Steamship Line from Trieste.—Consul-General Judd writes from Vienna, August 24, 1895:

A new Austrian steamship line, called Austro-Americana, plying between Trieste and the United States is about to be established. The line will have four steamers from 3,300 to 4,200 tons, and will inaugurate their sailings with the commencement of the cotton season in the fall of this year. The vessels will sail every six weeks and touch at New Orleans, Galveston, Mobile, Savannah, and other ports if found necessary.

Trade of Cochin.—Vice-Consul Comfort writes from Bombay, July 23:

I submit the following copy of a report received from Mr. J. Grieve, formerly United States consular agent at Cochin, India, within the territory covered by this consulate:

“Our season having now ended, I have pleasure in sending you the following short account of the trade done during the year ending June 30, as promised when I saw you in Bombay. Six American vessels, two British steamers, and four other vessels loaded cargo here for New York of the approximate value of 25 lakhs. Of the six American ships, three of them loaded part cargoes in Alleppey (about 30 miles from here) of the value of 82,000 rupees, while another American vessel loaded entirely in Alleppey cargo to the value of about 106,000 rupees. The above is exclusive of cargo that may have been sent to London for transshipment there to New York, of which there is no trace in the customs returns.”

Copyright Treaty Between Mexico and Spain.—The Department of State has received a dispatch from Mr. Armstrong, chargé d'affaires at Madrid, dated September 23, 1895, inclosing copy and translation of the copyright treaty recently signed between Mexico and Spain, and published at Madrid September 10. The treaty provides unconditional protection of rights in literary and art productions between the two countries.

An Opportunity for Astronomical Instrument Sellers.—Consular Agent Mertens writes from Valencia, September 27, 1895:

The Spanish Government has appropriated the amount of 300,000 pesetas (\$57,900) for the purchase of astronomical instruments for the Madrid observatory. I mention this with the object that American manufacturers and sellers of such instruments might hear of it and if possible have a share in these acquisitions. At the same time, I beg to mention that I am personally well introduced at the Madrid observatory and would take great pleasure in helping any American manufacturer or seller to obtain an order, if such sellers will direct themselves to me with prices, drawings, and particulars of their objects.

Rolling Stock for South African Railways.—Consul Hollis, of Mozambique, informs the Department, under date of September 19, 1895, that the rolling stock of the Delagoa Bay and Netherlands railway companies must be largely increased in order to give satisfactory dispatch to freight, and suggests that American manufacturers of narrow-gauge freight cars and engines communicate with the governor of Lourenco Marquez (in the Portuguese language) and the general manager of the Netherlands Railway Company, in Pretoria, South African Republic, as he thinks they will stand as good a chance of doing business with the South African railway company as the European firms who have hitherto furnished the rolling stock.

Consular Reports Reprinted Abroad.—The *Revue du Commerce Extérieur*, of Paris, in its issue of October 5, 1895, quotes at considerable length the

report of Consul-General Mason, of Frankfort, upon German trade relations with Russia, which was printed in CONSULAR REPORTS No. 174 (March 1895), p. 382.

Consular Reports Transmitted to Other Departments.—The following reports (originals or copies) were transmitted during the month of October to other Departments for publication or for proper action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
John Patton, Amherstburg.....	Oct. 2, 1895	Crops.....	Department of Agriculture.
George H. Murphy, Luxemburg.	Sept. 28, 1895	Hog diseases in Luxemburg...	Do.
Do.....	Oct. 4, 1895	.....do.....	Do.
Horace Lee Washington, Cairo.	Sept. 10, 1895	Cotton crop of Egypt.....	Do.
George G. Mathews, jr., Para..	Sept. 30, 1895	Consumption of American products.	Do.
Henry F. Merritt, Barmen.....	Sept. 21, 1895	Westphalian hams.....	Do.
Edward Schneegans, Saigon.....	Aug. 10, 1895	Rice.....	Do.
Do.....	Aug. 24, 1895	.....do.....	Do.
Do.....	Sept. 7, 1895	.....do.....	Do.
Do.....	Sept. 21, 1895	.....do.....	Do.

FOREIGN REPORTS AND PUBLICATIONS.

British Trade Returns.—The accounts of trade and navigation of the United Kingdom for the month of September, and for the nine months ending September 30, 1895, make the following showing:

IMPORTS.

Month and nine months.	1894.		1895.	
Month ended September 30.....	£30,240,461	\$147,150,083	£30,618,654	\$148,990,370
Increase.....			378,193	1,840,287
Nine months ended September 30.....	304,638,140	1,482,369,189	303,975,839	1,479,146,432
Decrease.....			662,301	3,222,756

The following articles show an increase during the month: Manufactured articles (\$3,130,911), miscellaneous articles, articles of food and drink (duty free), materials necessary to industries, oils, chemicals, animals for food, and parcel post. The articles showing a decrease during the month were textile fibers, dutiable articles of food and drink, metals, and tobacco.

The articles showing an increase during the nine months were: Manufactured articles (\$18,685,403), dutiable articles of food and drink, oils, and parcel post. The articles showing a decrease during the nine months were textile fibers, \$8,440,008; articles of food and drink, duty free, \$5,835,307; miscellaneous articles, metals, animals for food, and tobacco.

EXPORTS.

British and Irish produce and manufactures.

Month and nine months.	1894.		1895.	
Month ended September 30.....	£17,599,320	\$85,638,291	£19,461,940	\$94,701,800
Increase.....			1,862,620	9,063,509
Nine months ended September 30.....	161,462,571	785,676,870	166,620,437	810,775,046
Decrease.....			5,157,866	25,098,176

The only class showing a decrease during the month are chemicals and medicinal preparations, and these only to an extent of \$25,000. All other articles show an increase during the month in the following order: Yarns and textile fabrics, "all other articles," metals and manufactures thereof, apparel and articles of personal use, machinery and millwork, raw materials, articles of food and drink, living animals, and parcel post.

Exports of foreign and colonial produce and manufactures.

Month and nine months.	1894.		1895.	
Month ended September 30.....	£3,810,616	\$18,542,457	£3,907,836	\$19,015,530
Increase.....			97,220	473,073
Nine months ended September 30.....	42,881,659	208,662,153	45,118,843	219,548,790
Increase.....			2,237,184	10,886,137

We have thus for the nine months ended September 30, 1894 and 1895:

Total trade.	1894.		1895.	
Imports.....	£304,638,140	\$1,482,369,189	£303,975,839	\$1,479,146,432
Exports.....	204,344,230	994,339,023	211,739,280	1,030,323,336
Excess of imports.....	100,293,910	488,030,166	92,236,559	448,823,096

Exhibition of the South African Republic.—The Department of State has received a copy of the prospectus of the International Industrial Exhibition of the South African Republic, to be held at Johannesburg during May and June, 1896, under the auspices of the Government of the Republic. The exhibition will open May 1, continuing through June. The area of the grounds is 500,000 square feet and that of the main buildings 100,000 square feet. The rules and classification are the following:

The exhibition will be formally opened May 1, 1896, by S. J. P. Kruger, State President of the South African Republic, followed by addresses from members of his executive council.

The exhibition will be conducted by a director-general, representing and acting under the instructions of the executive committee.

The objects for exhibition will be arranged in groups, divided into classes, without respect to the nationality of exhibitors. This arrangement, however, may be modified if specially requested.

Anyone desirous to compete in this exhibition must inform the director-general on or before March 1, 1896, by sending an application form properly filled out and signed. Such forms are to be obtained at the office of the exhibition, Johannesburg.

The charge for space will be 10s. (\$2.50) per square foot in the grounds; 15s. (\$3.75) per square foot in the halls, 33⅓ per cent of total amount to be paid in when application is made. This tax for space is without regard to location in either grounds or halls, and is levied for the purpose of defraying in part the cost of construction and expense of running, providing amusements, etc. Concessions for foreign streets and villages, with selling privileges, will be granted on a basis of 33⅓ per cent of receipts.

The executive committee will provide motive power for machinery free of charge.

The full payment for the rent of space is due by the exhibitor or tenant April 1, 1896, and must be paid at the office of the director-general within one week thereafter.

Exhibits will be accepted from March 1 to April 10, 1896; after that time the committee may refuse all exhibits. All expenses for carriage must be prepaid.

The railway and steamship companies will grant special freight and passenger rates to exhibitors.

All articles for exhibition purposes will be admitted duty free; on articles sold, the usual percentage will be charged.

All exhibition buildings erected for the executive committee will be insured against fire.

Manufacturers whose goods are not already established in South Africa will readily find reliable business houses in Johannesburg willing to accept the agency. A list of these will be supplied on application to the Mercantile Association of Johannesburg and vouched for by them.

Some of the novel and interesting features of the exhibition will be an illusory elevator, a "midway," theater, fetes, concerts, sports from different nations, a jungle, illuminations, streets and villages from foreign cities, and the minor attractions usual to expositions.

During the exhibition the executive committee will arrange for the holding of mining and agricultural congresses.

Excursion trains from all the principal cities of South Africa will be run during the continuance of the exhibition. Special attention will be given to the matter of bringing out-of-town visitors to the exhibition.

Days for different nationalities will be duly celebrated.

General rules.—Every exhibitor or his representative must attend to the unpacking and installing of his exhibits and keep the same clean and in good condition during the term of the exhibition, insurance and every other attention that may be required being at his charge.

The committee undertakes general supervision and protection.

The committee reserves photographic privileges of the exhibition.

No placards, prospectuses, advertisements, etc., will be allowed distribution except from the exhibit advertised.

Exhibits may not be removed before the close of the exhibition without permission from the executive committee.

The executive committee reserves the right to remove any exhibits which, according to their opinion, may be dangerous, offensive, or undesirable.

Sale.—As soon as an object has been sold by an exhibitor, he shall give notice to the executive committee. The object sold must be provided with a label on which the word "sold" shall be distinctly written. The retail sale of all kinds of articles will be specially granted on application. The exhibitors, or their appointed representatives, shall have free admission to the exhibition ground during the hours it is open on showing a badge provided them by the committee. All admission tickets are strictly personal; if any abuse take place, the ticket will at once be withdrawn; no duplicates will be given for lost tickets; every exhibitor will be entitled to one ticket of admission.

Awards.—Awards will be granted by a jury subject to rules fixed later. They will consist of crosses of honor, gold, silver, and bronze medals and certificates. They will be distributed as soon as possible. Immediately after the awards are made an official list will be prepared and distributed in large numbers.

Catalogues.—The executive committee will prepare an official catalogue, containing a complete and graphic description of all articles exhibited, together with names of exhibitors and places of origin.

Special rules.—Special rules which may be necessary for order, public safety, and the general management of affairs will be placarded in the buildings and grounds, and will be binding on all concerned.

The executive committee is entitled to arrange and to decide finally all questions which have been omitted or insufficiently described in this prospectus.

The executive committee will be represented by the manager in every case they may think necessary.

Following is the list of groups under which the classification is arranged of apparatus, appliances, processes, and products invented or brought into use since 1800: (1) Agriculture, horticulture, and arboriculture; (2) mining and metallurgy; (3) engineering, construction, and architecture; (4) prime movers and means of distributing their power; (5) railway plant; (6) common road carriages, etc.; (7) naval architecture; (8) aeronautics; (9) manufacture of textile fabrics; (10) machine tools and machinery; (11) hydraulic machines, presses, ma-

chines for raising heavy weights, weighing, etc.; (12) elements of machines; (13) electricity; (14) apparatus, processes, and appliances connected with applied chemistry and physics; (15) gas and other illuminants; (16) fuel, furnaces, etc.; (17) food, cookery, and stimulants; (18) clothing; (19) jewelry; (20) leather, etc.; (21) india rubber, gutta-percha, etc.; (22) furniture and accessories (fancy goods); (23) pottery and glass; (24) cutlery, ironmongery, etc.; (25) firearms, military weapons, equipments, and explosives; (26) paper, printing, bookbinding, stationery, etc.; (27) clocks, watches, and other timekeepers; (28) philosophical instruments and apparatus; (29) photography; (30) educational apparatus; (31) toys, sports, etc.; (32) postal apparatus and appliances; (33) fire department appurtenances; (34) sanitary appliances; (35) instruments and appliances constructed or in use since 1800; (36) musical engraving and printing, modern painting, etc.; (37) historic collections.

Anyone desiring immediate replies regarding reservation of space is requested to cable at the expense of the exhibition. Cable address, "Exhibition," post-office box 1939; telegraph address, "Exhibition," A B C code, fourth edition.

The director-general of the exhibition, in a letter to President Cleveland, dated September 19, says:

The Government of the South African Republic offers through this exhibition an opportunity to introduce and advance American products, and will be pleased to extend its protection to any merchants or manufacturers desiring to exhibit in this country.

New Railways in Japan.*—The Belgian vice-consul at Yokohama reports that railway construction in Japan, interrupted for a time by the war, has again come to the front since the conclusion of the peace with China. A sum of 25,000,000 yen [silver yen=52.4 cents on October 1, 1895] has already been voted for the construction of a double line from Tokyo to Kobé. This line is 376 English miles long, and passes through the commercial and industrial centers of Japan—Yokohama, Kyoto, Osaka, and Kobé.

The Japanese people take a great interest in the extension of their railway system. Before the war, companies were being formed to take up the railways run by the Government, but when war was declared it was feared that the loans issued for the struggle with China, and floated in the interior of the country, would impede the circulation of capital and absorb all the resources of Japan, and, in consequence, at the close of last year, the construction of most of the new lines was suspended for a time.

When it was seen that the war would probably not have any serious effect on the trade and finance of Japan, commerce and industry received a new impetus before the conclusion of hostilities, and now this activity is seen in the construction of railways, numerous lines being projected in different parts of the Empire. Official figures state that in March, 1895, there were in Japan twenty-nine railway companies which had obtained concessions. The total length of line belonging to them was then 2,193 miles, of which, however, only 1,549 miles had been opened for traffic. The State railways

* Translated from Bulletin du Musée Commercial, and printed in British Board of Trade Journal, October 1895, pp. 393-394.

are not very important, comprising only 580 miles of line completed and 398 miles in course of construction, and for which funds have been voted. The total capital of the twenty-nine companies above mentioned is 89,643,000 yen, and that of the Government lines is 56,554,000 yen. Some of the companies have not as yet opened any line; these are the Hatsusi, Naniwa, Dogo, Nanyo, Ota, Boso, Nara, and Hasha. Their total capital is 4,900,000 yen.

Nine other companies have only a part of their lines in working order, the subscribed capital not having been yet all paid up. These are the Nippon, Sanyo, Kyushin, Chikoku, Kwansai, Osaka, Jyo, Asume, and Hantau companies. The remainder, viz, the Sanaki, Kobu, Panko, Ryomo, Hankaï, Settsu, Hashiro, Sangu, Sano, Tobu, and Kawage companies work all their lines for which concessions have been obtained. The capital of these eleven companies amounts to 13,265,000 yen.

The companies which have been seeking concessions have a combined capital of 40,000,000 yen, and some of them have lately published the clauses and conditions of their *cahiers des charges* as well as notices of tender for plant and rolling stock. At the same time they do not make it an affair of open competition, but apply a restricted system, accepting only tenders from accredited manufacturers and agents.

In order that a business house or factory should be accredited, the goods that they supply must have been "proved"—that is, the manufacturer or agent must have proved the value of his goods in Japan itself, unless he can produce certificates of a kind as to dispense with such proof. For not wishing to conform to this custom, certain establishments have lost several large orders for Japan. It is quite difficult to get a footing in the Japanese market, but once obtained, the clientele is stable enough. English firms have found means of adapting their interests to Japanese demands, and thus almost monopolize the orders for the material for State railways.

As it is, the *cahiers des charges* of the State and of the companies are communicated regularly to certain merchants and representatives of foreign manufactories, a system which has not been in force long, as, a short time ago one single English firm it is stated transacted all the business connected with the Japanese State railways. This kind of monopoly was resisted, and finally it was decided to distribute the tenders among several firms of different nationalities. Up to now, however, no country has succeeded in ousting Great Britain from her position as the furnisher of railway plant and rolling stock.

The New Treaty Port of Sha-shih.—The British Board of Trade Journal for October, 1895, p. 391, gives some interesting information concerning the new treaty port of Sha-shih, China, from a report by the British consul at Ichang. The port is situated about 85 miles below the latter place:

The probable site of the steamer anchorage is just above or immediately below the landing wharf for passengers, and it is proposed to erect the custom-house close by. The line of

junks moored to the banks at Sha-shih extends to a length of not less than 4 miles, which is, in itself, a practical proof of the commercial importance of the place, and it has always been regarded as a great distributing center, though its own trade may be comparatively small. In the customs decennial report for Ichang, 1891, Mr. Ludlow says: "Sha-shih being the crossing point of two most important routes of commerce in central China, moving from west to east and from north to south, and *vice versa*, Szuchuan native craft are thus always able to obtain return freights;" and, again, "quite at the end of the year a small lot of Szuchuan opium was taken delivery of for conveyance to Sha-shih by native boat; this was followed by larger shipments, and may result in new and important development of the opium trade with the interior. Shipments to Sha-shih are by far the speediest way of supplying Hunan, not to speak of the vast tracks of country in Hupeh for which Sha-shih has been for years the distributing center. It is said that nearly 6,000 piculs of Szuchuan opium go to Sha-shih yearly by native channels."

There is a trade in cotton cloth manufactured in Sha-shih and exported to Szuchuan, and possibly Kueichow and Yunnan, which amounts to 2,000,000 taels a year, the annual likin revenue on it reaching 100,000 taels. It is reasonable to suppose that if both Sha-shih and Chungking are opened to steamer traffic, this cotton-cloth trade alone would develop enormously.

At Ching-chou-fu, about 4 miles inland from Sha-shih, there are already several large shops trading in kerosene oil, lamps, candles, matches, soaps, and all the foreign odds and ends that are to be seen in the large native shops at Shanghai.

Concerning the position of Sha-shih, the most noticeable feature is the fact that it, together with the plain in which Ching-chou-fu is situated, lies below the level of the river, from which it is protected by a huge embankment, which runs for miles above and below the town. The plain is richly cultivated with tobacco, beans, several kinds of melons and gourds, maize, and other vegetables, and great damage and disaster would be brought about if any break in the embankment should occur during the time of summer high water. Partly on account of this risk, but chiefly because such low-lying ground can not be healthy, neither the town of Sha-shih nor the ground adjoining could in any way be recommended as a residence for foreigners. Both above and below the town the ground rises gradually from the river to the embankment, and descends rather abruptly on the other side. The town itself is much like other native towns of its size, the population being estimated at 87,000, or double that of Ichang. The inhabitants have generally had a name for dislike of foreigners, but when the port is opened there will be, doubtless, great improvement in that respect.

Projected Canal Between the Baltic and Black Seas.*—The Russian Government has the intention of uniting the Baltic to the Black Sea by a navigable canal of 8.85 meters (29.13 feet) of water gauge. The canal would commence at Riga, would utilize the Duna, the Beresina, and the Dnieper and end at Kherson, on the Black Sea. There would be no canal, properly speaking, except to unite the Beresina with the Duna. The total length would be about 1,600 kilometers (984 miles), and the least width 67 meters (219.8 feet) on the water surface, and 36.60 meters (120 feet) at bottom.

The topographical conditions are most favorable, since they would require only one lock at each end. The canal would, besides, pass over a clay soil, which would give every confidence in the security of the canal and would provide the bricks necessary for the masonry work.

* Translated from *Revue du Commerce Extérieur*, Paris, October 5, 1895.

Ports would be established at Kherson, Aleschki, Erislavi, Nikopole, Alexandrousk, Werchnedineprowsk, Krementschug, Kanew, Kjew, Lepel, Dunaberg, Jakobstadt, Riga, etc. A vast reservoir established at Pinsk would also permit the new route to connect with the Niemen and the Vistula through the River Pripijat. The terminal locks would be erected at Kherson and at Riga, which ports would be enlarged.

The construction of the canal would cause the building of seven great railroad bridges and twenty-two roadway bridges. The total cost, including the purchase of the ground, is estimated at 500,000,000 francs (\$96,500,000), and it is calculated that the works could be finished in five years. At the rate of 6 knots, vessels could pass through the canal in six days.

British Commercial Mission to China.—The London and China Telegraph of October 7, 1895, says:

At the Blackburn and District Chamber of Commerce on the 30th ultimo, the report of the council upon the proposal to send out a commercial mission to China was taken. At the July meeting, a resolution was passed asking the council to consider the advisability of dispatching such a mission, with the object "of studying the economic conditions of that country as a field for a greatly extended British trade; to ascertain the class of goods suited to the taste, climate, and the purchasing power of the people; to report upon all matters relating to transport, transit passes, and payments." It was also agreed that if the council reported favorably, the chambers of commerce of the United Kingdom should be asked to contribute to the expense of such mission, and that the Government be asked to officially accredit the mission to the Chinese Government.

The report presented by the council to the chamber was favorable to the proposal. It was of a voluminous character. Consular reports were quoted to show that there has been a gradual decline in British trade with China since 1885. With regard to cotton piece goods and woolen and worsted stuffs, the report stated that it was impossible to overestimate the benefit which would accrue to Lancashire and Yorkshire by even a doubling of the export, let alone raising it to the standard enjoyed in India. The export of cotton yarns was shown to have decreased from 16,596,440 pounds in 1880-1884 to 9,769,500 pounds in 1894, and cotton goods from 427,749,680 yards in 1880-1884 to 425,440,000 yards in 1894. Woolens and worsteds had declined in that period from 19,646,480 yards to 14,089,800 yards. The consular report from Canton was quoted in support of the proposed mission. Having quoted other authorities to prove that the present is a favorable time for the dispatch of a commercial mission to China, the report concluded: "We must either have new markets or make an effort to develop those we already possess. Surely, with vast interests at stake, and with money in the country which can find no profitable employment, it should not be a difficult matter to equip and maintain an expedition such as that for which your material support is now asked."

The report met with general approval. Several members favored a proposal for an immediate conference between the Lancashire and Yorkshire chambers of commerce, with a view of dispatching, at an early date, representatives of the cotton and woolen industries. The president said that unless the project met with the entire support of the chambers in all large industrial centers, it would not be anything like so valuable as that recently sent from France.

Copies of the report were ordered to be sent to all British chambers of commerce to ascertain what help they were disposed to afford.

French Mission to the Far East.*—The Minister of Commerce, Industry, and Posts and Telegraphs of France has just intrusted Mr. Henri Fromageot, doctor of laws and attorney of the court of appeals of Paris, with a mission to the different ports or harbors of the far East and the Pacific Ocean, for the purpose of studying, on the spot, the conditions and usages under which commerce and maritime traffic are conducted.

Artificial Wines of Portugal.*—By a decree, the Portuguese Government has forbidden the manufacture of wines, either simple or mixed, from the residuum of grapes, sugar, raisins, and concentrated must, or their shipment and sale in order to favor the sale of genuine wines.

* Translated from *Revue du Commerce Extérieur*, Paris, October 5, 1895.

CONTENTS.

	Page.
I.—SIERRA LEONE: INDUSTRIAL RESOURCES AND TRADE..... <i>Pooley</i>	401
II.—REAL-ESTATE MORTGAGES IN RUSSIA..... <i>Pierce</i>	410
III.—RURAL LOAN ASSOCIATIONS IN GERMANY..... <i>Merritt</i>	425
IV.—AGRARIAN MOVEMENT IN GERMANY..... <i>de Kay</i>	431
V.—ERHARDT PROCESS IN METAL WORKING..... <i>Mason</i>	434
VI.—AUSTRIA-HUNGARY: TRADE, PRODUCTION, ETC..... <i>Hammond</i>	436
(Rice Culture, 437—Sea Traffic of Fiume, 439—Trade with Egypt, 440—Exports of Horses, 441—Sugar Export, 441—Grain Crop of Hungary, 442—Flour Trade of Hungary in 1894, 444—Flour Exports from Hungary, 445—Hungary's Flour Trade with Brazil, 446—Hungarian Flour Exports to England, 448—Hungary's Tobacco Administration, 448—Hungarian Wine Exports to India, 449—Hungarian Exports of Sugar, Spirits, and Plums, 449.)	
VII.—COMMERCIAL DUTIES OF AUSTRO-HUNGARIAN CONSULS..... <i>Stephan</i>	450
VIII.—UNITED STATES CONSULAR SERVICE AND FOREIGN TRADE..... <i>Tingle</i>	456
IX.—SOCIETIES AIDING GERMAN TRADE..... <i>Johnson</i>	459
X.—TRANSPORTATION OF WHEAT IN THE ARGENTINE REPUBLIC..... <i>Baker</i>	460
XI.—GRAIN CROPS IN THE ARGENTINE REPUBLIC..... <i>Buchanan</i>	477
XII.—MARTINIQUE: BUSINESS DEPRESSION, RESOURCES, ETC..... <i>Tucker</i>	478
(Banking and Financial Difficulties, 478—United States Flour, 486—Proposed Tariff Changes for United States Products, 489—Diversion of Sugar Exports—East Indian Rice, 490.)	
XIII.—INTERSTATE TARIFFS IN MEXICO..... <i>Donnelly</i>	490
XIV.—YUCATAN: RESOURCES, COMMERCE, ETC..... <i>Oliver</i>	495
XV.—BANANA TRADE OF COLOMBIA..... <i>Smyth</i>	502
XVI.—OLEOMARGARINE IN PUERTO RICO..... <i>Latimer</i>	503
XVII.—MONOPOLY OF LIQUORS IN NICARAGUA.....	505
XVIII.—COMMERCIAL LICENSES IN NICARAGUA.....	507
XIX.—THE NEW SUGAR CROP OF EUROPE..... <i>Mason</i>	508
XX.—STATISTICS OF GERMAN MINERS..... <i>Merritt</i>	510
XXI.—GERMAN IRON AND MACHINES IN RUSSIA.....	512
XXII.—GERMANY AND THE BALKAN COUNTRIES.....	513
XXIII.—MUSICAL INSTRUMENTS IN BULGARIA.....	514
XXIV.—NAVAL EXHIBITION AT KIEL..... <i>Robertson</i>	516
XXV.—DAMAGE TO BAVARIAN FORESTS BY CATERPILLARS..... <i>Black</i>	521

	Page.
XXVI.—NOTES (Hygienic Exposition of Warsaw—Bills of Lading for Cuba—Mackerel Fishing off the Irish Coast—Lime Industry in Bermuda—Refund of Duties by Brazil—Coffee Crop of Colombia—Danish Proclamation as to Export of Cattle—Italian Commercial Museum in Paris—Indian Corn in Italy—Italian Savings Banks—Phylloxera in Italy—Orange and Lemon Crop in Southern Italy—Increased Importation of Lemons—Bitter-Orange Trees for Grafting—Olive-Oil Production in Italy—Japanese Laborers in Guadeloupe—Ravages of Locusts in Zambesia—Receipts of Gold at the Melbourne Mint—Cotton Mills in China—Straits Settlements Statistics—Consular Reports Transmitted to Other Departments).....	523
XXVII.—FOREIGN REPORTS AND PUBLICATIONS (British Trade with China and Japan—British Trade Returns—The Foreign Trade of France—Exhibition of California Products in Berlin—Establishment of Cotton Mills in China—New Series of Russian Consular Reports—Revenue of the Kaiser Wilhelm Canal—Examinations for the United States Consular Service)	532

REPORTS BY COUNTRIES.

	Page.
ARGENTINE REPUBLIC:	
Grain crops in.....	477
Transportation of wheat in.....	460
AUSTRALIA:	
Receipts of gold at the Melbourne mint.....	530
AUSTRIA-HUNGARY:	
Commercial duties of consuls of.....	450
Exports of horses from.....	441
Flour exports from Hungary.....	445
Flour trade of Hungary in 1894.....	444
Grain crop of Hungary.....	442
Hungarian exports of sugar, spirits, and plums.....	449
Hungarian flour exports to England.....	448
Hungarian wine exports to India.....	449
Hungary's flour trade with Brazil.....	446
Hungary's tobacco administration.....	448
Rice culture in.....	437
Sea traffic of Fiume.....	439
Sugar export of.....	441
Trade, production, etc., in.....	436
Trade with Egypt.....	440
BAVARIA:	
Damage to forests by caterpillars in.....	521
BERMUDA:	
Lime industry in.....	526
BRAZIL:	
Refund of duties by.....	526
BULGARIA:	
Musical instruments in.....	514
CHINA:	
Cotton mills in.....	531
COLOMBIA:	
Banana trade of.....	502
Coffee crop of.....	526
CUBA:	
Bills of lading for.....	523
DENMARK:	
Proclamation as to export of cattle.....	527
EUROPE:	
New sugar crop of.....	510
FRANCE:	
Italian commercial museum in Paris.....	527
GERMANY:	
Agrarian movement in.....	431
Erhardt process of metal working in.....	434
Germany and the Balkan countries.....	513

GERMANY—Continued.	Page.
Naval exhibition at Kiel.....	516
Rural loan associations in.....	425
Societies aiding trade of.....	459
Statistics of miners in.....	510
GUADELOUPE:	
Japanese laborers in.....	529
IRELAND:	
Mackerel fishing off the Irish coast.....	524
ITALY:	
Bitter-orange trees for grafting in.....	529
Increased importation of lemons from Palermo into the United States.....	529
Indian corn in.....	527
Olive-oil production in.....	529
Orange and lemon crop in southern.....	528
Phylloxera in.....	528
Savings banks in.....	528
MARTINIQUE:	
Banking and financial difficulties in.....	481
Business depression, resources, etc., of.....	478
Diversion of sugar exports from the United States.....	490
East Indian rice in.....	490
Proposed tariff changes for United States products in.....	489
United States flour in.....	486
MEXICO:	
Interstate tariffs in.....	490
MOZAMBIQUE:	
Ravages of locusts in Zambesia.....	530
NICARAGUA:	
Commercial licenses in.....	507
Monopoly of liquors in.....	505
POLAND:	
Hygienic exposition of Warsaw.....	523
PUERTO RICO:	
Oleomargarine in.....	503
RUSSIA:	
German iron and machines in.....	512
Real-estate mortgages in.....	410
SIERRA LEONE:	
Industrial resources and trade in.....	401
STRAITS SETTLEMENTS:	
Statistics of.....	531
UNITED STATES:	
Consular service and foreign trade of.....	456
YUCATAN:	
Resources, commerce, etc., of.....	495

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1894, have been prepared to assist in computing the proper values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.2 cents in April, 1894, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—Countries with fixed currencies.

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange." It follows, therefore, that when foreign money orders are required, the post-office authorities, to save the Department from incurring loss in such transactions, add the rate of exchange to these valuations.

Countries.	Standard.	Monetary unit.	Value in terms of United States gold.	Coins.
Argentine Republic*....	Gold and silver...	Peso	\$0.96, 5	Gold—Argentine (\$4.82, 4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20, 3	Gold—20 crowns (\$4.05, 2) and 10 crowns.
Belgium.....	Gold and silver...	Franc.....	.19, 3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis .....	.54, 6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland)).	..... do.....	Dollar.....	1.00	
Chile‡.....	Gold and silver...	Peso .....	.91, 2	Gold—escudo (\$1.82, 4), doubloon (\$4.56, 11), and condor (\$9.12, 8); silver—peso and divisions.
Cuba.....	.....do.....	.....do.....	.92, 6	Gold—doubloon (\$5.01, 7); silver—peso.
Denmark.....	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Egypt.....	.....do.....	Pound (100 piasters).	4.94, 3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do.....	Mark.....	.19, 3	Gold—10 and 20 marks (\$1.93 and \$3.85, 9).
France.....	Gold and silver...	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany.....	Gold	Mark.....	.23, 8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do.....	Pound sterling....	4.86, 6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver...	Drachma.....	.19, 3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti.....	.....do.....	Gourde.....	.96, 5	Silver—gourde.
Italy.....	.....do.....	Lira.....	.19, 3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Liberia.....	Gold	Dollar	1.00	
Netherlands‡	Gold and silver...	Florin.....	.40, 2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland.....	Gold	Dollar.....	1.01, 4	Gold—\$2 (\$2.02, 7).
Portugal.....	Gold	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Spain.....	Gold and silver...	Peseta.....	.19, 3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway...	Gold	Crown.....	.26, 8	Gold—10 and 20 crowns.
Switzerland.....	Gold and silver...	Franc.....	.19, 3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey.....	Gold	Piaster.....	.04, 4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver....	Bolivar.....	.19, 3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875 the gold standard prevailed in the Argentine Republic. Its currency does not appear in the statements again until 1883, when the double standard prevailed, and the peso attained a fixed value of 96.5 cents.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ending July 1, 1892. The next quarter (October 1) inaugurated the gold standard (*see* note under table of "fluctuating currencies").

‡ The gold standard prevailed in Chile until January 1, 1890. The value of the peso has been the same under both standards.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

B.—Countries with fluctuating currencies, 1874-'90.

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver.....	Florin.....	\$0.47,6	\$0.45,3	\$0.45,3	\$0.41,3	\$0.40,1	\$0.39,8
Bolivia.....	do.....	Dollar until 1880; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America...	do.....	Peso.....	.96,5	.91,8	.91,8	.83,6		
China.....	Silver.....	Haikwan tael....	1.61	1.61				
Colombia.....	do.....	Peso.....	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador.....	do.....	do.....	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†.....	Gold.....	Pound (100 piasters).			4.97,4	4.97,4	4.90	4.90
India.....	Silver.....	Rupee.....	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan.....	{ Gold..... Silver.....	{ Yen.....	{ .99,7	{ .99,7	{ .99,7	{ .99,7	{ .87,6	{ .86,9
Mexico.....	do.....	Dollar.....	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands ‡.....	Gold and silver..	Florin.....	.40,5	.38,5	.38,5	.40,2		
Peru.....	Silver.....	Sol.....	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia.....	do.....	Ruble.....	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli.....	do.....	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver.....	Florin.....	\$0.39,3	\$0.37,1	\$0.35,9	\$0.34,5	\$0.33,6	\$0.42
Bolivia.....	do.....	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America...	do.....	Peso.....				.69,9	.68	.85
Colombia.....	do.....	do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador.....	do.....	do.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†.....	Gold.....	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.93,3
India.....	Silver.....	Rupee.....	.37,8	.35,7	.34,6	.33,2	.32,3	.40,4
Japan.....	{ Gold..... Silver.....	{ Yen.....	{85,8	{81	{ .99,7 .78,4	{ .99,7 .75,3	{ .99,7 .73,4	{ .99,7 .91,7
Mexico.....	do.....	Dollar.....	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru.....	Silver.....	Sol.....	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia.....	do.....	Ruble.....	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli.....	do.....	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at \$4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—Quarterly valuations of fluctuating currencies, 1891-'94.

Countries.	Monetary unit.	1892.				1893.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Austria-Hungary *	{ Gold crown.....				\$0. 20, 3				
	{ Silver florin.....	\$0. 34, 1	\$0. 32, 8	\$0. 32					
Bolivia.....	Silver boliviano.....	.69, 1	.66, 5	.64, 9	.61, 6	\$0. 61, 3	\$0. 61	\$0. 60, 4	\$0. 53, 1
Central America...	Silver peso.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
China†.....	{ Shanghai tael..	1.02, 1	.98, 2	.95, 8	.91	.90, 6	.90, 1	.89, 2	.76, 4
	{ Haikwan tael..	1.13, 7	1.09, 3	1.06, 7	1.01, 3	1.01	1.00, 4	.99, 4	.87, 4
Colombia.....	Silver peso.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
Ecuador.....	do.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
India.....	Silver rupee.....	.32, 8	.31, 6	.30, 8	.29, 3	.29, 2	.29	.28, 7	.25, 2
Japan‡.....	Silver yen.....	.74, 5	.71, 6	.69, 9	.66, 4	.66, 1	.65, 8	.65, 1	.57, 3
Mexico.....	Silver dollar.....	.75	.72, 2	.70, 4	.66, 9	.66, 6	.66, 2	.65, 6	.57, 7
Peru.....	Silver sol.....	.69, 1	.66, 5	.64, 9	.61, 6	.61, 3	.61	.60, 4	.53, 1
Russia§.....	Silver ruble.....	.55, 3	.53, 1	.51, 9	.49, 2	.49, 1	.48, 8	.48, 3	.42, 5
Tripoli.....	Silver mahbub..	.62, 3	.60	.58, 5	.55, 5	.55, 3	.55	.54, 5	.47, 2
Venezuela |.....	Silver bolivar....	.13, 8	.13, 3	.13	.12, 3				

Countries.	Monetary unit.	1894.				1895.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia.....	Silver boliviano	\$0. 51, 6	\$0. 46, 5	\$0. 45, 7	\$0. 46, 4	\$0. 45, 5	\$0. 44, 1	\$0. 48, 6	.48, 6
Central America ...	Silver peso.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
China†.....	{ Shanghai tael..	.76, 2	.68, 6	.67, 6	.68, 5	.67, 3	.65, 2	.71, 8	.71, 8
	{ Haikwan tael..	.84, 9	.76, 5	.75, 3	.76, 3	.74, 9	.75, 6	.80	.80, 0
	{ Tien-Tsin tael.				.72, 7	.71, 4	.69, 2	.76, 1	.76, 2
	{ Chefoo tael.....				.71, 7	.70, 4	.68, 3	.75, 1	.75, 2
Colombia.....	Silver peso.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
Ecuador.....	do.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
India.....	Silver rupee.....	.24, 5	.22, 1	.21, 7	.22	.21, 6	.21, 0	.23, 1	.23, 1
Japan‡.....	Silver yen.....	.55, 6	.50, 1	.49, 3	.50	.49, 1	.47, 6	.52, 4	.52, 4
Mexico.....	Silver dollar.....	.56	.50, 5	.49, 7	.50, 4	.49, 5	.47, 9	.52, 8	.52, 8
Persia.....	Silver kran.....							.08, 9	.09, 0
Peru.....	Silver sol.....	.51, 6	.46, 5	.45, 7	.46, 4	.45, 5	.44, 1	.48, 6	.48, 6
Russia§.....	Silver ruble.....	.41, 3	.37, 2	.36, 6	.37, 1	.36, 4	.35, 3	.38, 9	.38, 9
Tripoli.....	Silver mahbub..	.46, 5	.41, 9	.41, 3	.41, 8	.41, 1	3.9, 8	.43, 8	.43, 8

* Austria-Hungary had the silver standard up to August, 1892 (*see* note to "fluctuating" table B).

† China (silver). The Haikwan tael is the customs tael, and the Shanghai tael that used in trade. Consul-General Denny (CONSULAR REPORTS No. 43, p. 516) says: "The value of the tael varies in the different ports of China, and every port has two taels, one being the Government, or Haikwan, tael, in which all duties have to be paid, and the other the market tael, the former exceeding the latter by some 11 per cent."

‡ Gold is the nominal standard in Japan, but silver is practically the standard. The fixed value of the gold yen is 99.7 cents.

§ The gold ruble is valued at 77.2 cents. Silver is the nominal standard, but paper is the actual currency, and its depreciation is measured by the gold standard.

| The Venezuelan bolivar became fixed in value (19.3 cents) on January 1, 1892.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalent.
Almude.....	Portugal.....	4.422 gallons.
Ardeb.....	Egypt.....	7.6907 bushels.
Are.....	Metric.....	0.02471 acre.
Arobe.....	Paraguay.....	25 pounds.
Arratel or libra.....	Portugal.....	1.011 pounds.
Arroba (dry).....	Argentine Republic.....	25.3175 pounds.
Do.....	Brazil.....	32.38 pounds.
Do.....	Cuba.....	25.3664 pounds.
Do.....	Portugal.....	32.38 pounds.
Do.....	Spain.....	25.36 pounds.
Do.....	Venezuela.....	25.4024 pounds.
Arroba (liquid).....	Cuba, Spain, and Venezuela.....	4.263 gallons.
Arshine.....	Russia.....	28 inches.
Arshine (square).....	.....do.....	5.44 square feet.
Artel.....	Morocco.....	1.12 pounds.
Baril.....	Argentine Republic and Mexico.....	20.0787 gallons.
Barrel.....	Malta (customs).....	11.4 gallons.
Do.....	Spain (raisins).....	100 pounds.
Berkovet.....	Russia.....	361.12 pounds.
Bongkal.....	India.....	832 grains.
Bonw.....	Sumatra.....	7,096.5 square meters.
Bu.....	Japan.....	0.1 inch.
Butt (wine).....	Spain.....	140 gallons.
Caffiso.....	Malta.....	5.4 gallons.
Candy.....	India (Bombay).....	529 pounds.
Do.....	India (Madras).....	500 pounds.
Cantar.....	Morocco.....	113 pounds.
Do.....	Syria (Damascus).....	575 pounds.
Do.....	Turkey.....	124.7036 pounds.
Cantaro (Cantar).....	Malta.....	175 pounds.
Carga.....	Mexico and Salvador.....	300 pounds.
Catty.....	China.....	1.333 1/3 (1 1/3) pounds.
Do.....	Japan.....	1.31 pounds.
Do.....	Java, Siam, Malacca.....	1.35 pounds.
Do.....	Sumatra.....	2.12 pounds.
Centaro.....	Central America.....	4.2631 gallons.
Centner.....	Bremen and Brunswick.....	117.5 pounds.
Do.....	Darmstadt.....	110.24 pounds.
Do.....	Denmark and Norway.....	110.11 pounds.
Do.....	Nuremberg.....	112.43 pounds.
Do.....	Prussia.....	113.44 pounds.
Do.....	Sweden.....	93.7 pounds.
Do.....	Vienna.....	123.5 pounds.
Do.....	Zollverein.....	110.24 pounds.
Do.....	Double or metric.....	220.46 pounds.
Chih.....	China.....	14 inches.
Coyan.....	Sarawak.....	3,098 pounds.
Do.....	Siam (Koyan).....	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Cuadra.....	Argentine Republic.....	4.2 acres.
Do.....	Paraguay.....	78.9 yards.
Do.....	Paraguay (square).....	8.077 square feet.
Do.....	Uruguay.....	Nearly 2 acres.
Cubic meter.....	Metric.....	35.3 cubic feet.
Cwt. (hundredweight).....	British.....	112 pounds.
Dessiatine.....	Russia.....	2.6997 acres.
Do.....	Spain.....	1.599 bushels.
Drachme.....	Greece.....	Half ounce.
Dun.....	Japan.....	1 inch.
Egyptian weights and measures.....	(See CONSULAR REPORTS No. 144.)	
Fanega (dry).....	Central America.....	1.5745 bushels.
Do.....	Chile.....	2.575 bushels.
Do.....	Cuba.....	1.599 bushels.
Do.....	Mexico.....	1.54728 bushels.
Do.....	Morocco.....	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do.....	Uruguay (double).....	7.776 bushels.
Do.....	Uruguay (single).....	3.888 bushels.
Do.....	Venezuela.....	1.599 bushels.
Fanega (liquid).....	Spain.....	16 gallons.
Feddan.....	Egypt.....	1.03 acres.
Frail (raisins).....	Spain.....	50 pounds.
Frasco.....	Argentine Republic.....	2.5096 quarts.
Do.....	Mexico.....	2.5 quarts.
Fuder.....	Luxemburg.....	264.17 gallons.
Garnice.....	Russian Poland.....	0.88 gallon.
Gram.....	Metric.....	15.432 grains.
Hectare.....	.....do.....	2.471 acres.
Hectoliter:		
Dry.....	.....do.....	2.838 bushels.
Liquid.....	.....do.....	26.417 gallons.
Joch.....	Austria-Hungary.....	1.422 acres.
Ken.....	Japan.....	4 yards.
Kilogram (kilo).....	Metric.....	2.2046 pounds.
Kilometer.....	.....do.....	0.621376 mile.
Klafter.....	Russia.....	216 cubic feet.
Kota.....	Japan.....	5.13 bushels.
Korree.....	Russia.....	3 5 bushels.
Last.....	Belgium and Holland.....	85.134 bushels.
Do.....	England (dry malt).....	82.52 bushels.
Do.....	Germany.....	2 metric tons (4,480 pounds).
Do.....	Prussia.....	112.29 bushels.
Do.....	Russian Poland.....	11 3/8 bushels.
Do.....	Spain (salt).....	4,760 pounds.
League (land).....	Paraguay.....	4,633 acres.
Li.....	China.....	2,115 feet.
Libra (pound).....	Castilian.....	7,100 grains (troy).
Do.....	Argentine Republic.....	1.0127 pounds.
Do.....	Central America.....	1.043 pounds.
Do.....	Chile.....	1.014 pounds.
Do.....	Cuba.....	1.0161 pounds.
Do.....	Mexico.....	1.01465 pounds.
Do.....	Peru.....	1.0143 pounds.
Do.....	Portugal.....	1.011 pounds.
Do.....	Uruguay.....	1.0143 pounds.
Do.....	Venezuela.....	1.0161 pounds.
Liter.....	Metric.....	1.0567 quarts.
Livre (pound).....	Greece.....	1.1 pounds.
Do.....	Guiana.....	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Load.....	England (timber).....	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 super- ficial feet.
Manzana	Costa Rica.....	1½ acres.
Marc.....	Bolivia.....	0.507 pound.
Maund.....	India.....	82½ pounds.
Meter.....	Metric	39.37 inches.
Mil.....	Denmark.....	4.68 miles
Do.....	Denmark (geographical).....	4.61 miles.
Morgen.....	Prussia.....	0.63 acre.
Oke.....	Egypt.....	2.7225 pounds.
Do.....	Greece	2.84 pounds.
Do.....	Hungary	3.0817 pounds.
Do.....	Turkey.....	2.85418 pounds.
Do.....	Hungary and Wallachia.....	2.5 pints.
Pic.....	Egypt.....	21¼ inches.
Picul.....	Borneo and Celebes.....	135.64 pounds.
Do.....	China, Japan, and Sumatra.....	133½ pounds.
Do.....	Java	135 1 pounds.
Do.....	Philippine Islands (hemp).....	139 45 pounds.
Do.....	Philippine Islands (sugar).....	140 pounds.
Pic.....	Argentine Republic.....	0.9478 foot.
Do.....	Castilian	0.91407 foot.
Pik.....	Turkey.....	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound).....	Denmark and Sweden.....	1 102 pounds.
Quarter.....	Great Britain.....	8.252 bushels.
Do.....	London (coal).....	36 bushels.
Quintal.....	Argentine Republic.....	101.42 pounds.
Do.....	Brazil.....	130.06 pounds.
Do.....	Castile, Chile, Mexico, and Peru.....	101.61 pounds.
Do.....	Greece	123.2 pounds.
Do.....	Newfoundland (fish).....	112 pounds.
Do.....	Paraguay.....	100 pounds.
Do.....	Syria.....	125 pounds.
Do	Metric	220.46 pounds.
Rottle.....	Palestine	6 pounds.
Do.....	Syria.....	5¼ pounds.
Sagen.....	Russia	7 feet.
Salm.....	Malta.....	490 pounds.
Se.....	Japan.....	3.6 feet.
Seer.....	India.....	1 pound 13 ounces.
Shaku.....	Japan.....	10 inches.
Sho.....	.....do.....	1.6 quarts.
Standard (St. Petersburg).....	Lumber measure.....	165 cubic feet.
Stone	British	14 pounds.
Suerte.....	Uruguay.....	2,700 cuadras (<i>see cua-</i> <i>dra</i>).
Tael.....	Cochin China.....	590.75 grains (troy).
Tan.....	Japan.....	0.25 acre.
To.....	.....do.....	2 pecks.
Ton.....	Space measure.....	40 cubic feet.
Tonde (cereals).....	Denmark.....	3.94783 bushels.
Tondeland .....	.....do.....	1.36 acres.
Tsubo.....	Japan.....	6 feet square.
Tsun.....	China.....	1.41 inches.
Tunna	Sweden	4 5 bushels.
Tunnland.....	.....do.....	1.22 acres.
Vara.....	Argentine Republic.....	34.1208 inches.
Do.....	Castile.....	0.914117 yard.
Do.....	Central America.....	38.874 inches.

XII

FOREIGN WEIGHTS AND MEASURES.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalent.
Vara.....	Chile and Peru	33.367 inches.
Do.....	Cuba.....	33.384 inches.
Do.....	Curaçao	33.375 inches.
Do.....	Mexico.....	33 inches.
Do.....	Paraguay.....	34 inches.
Do.....	Venezuela.....	33.384 inches.
Vedro.....	Russia	2.707 gallons.
Vergees.....	Isle of Jersey.....	71.1 square rods.
Verst.....	Russia.....	0.663 mile.
Vlocka.....	Russian Poland.....	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measure.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measure.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (100 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.

Hectometer (100 meters) equals 328 feet 1 inch.

Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).

Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.

Are (100 square meters) equals 119.6 square yards.

Hectare (10,000 square meters) equals 2.471 acres.

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SIERRA LEONE: INDUSTRIAL RESOURCES AND TRADE.

I forward by the same mail with this report copies of the Sierra Leone Weekly News, which contains the speech of the governor of the colony, delivered before the legislative council on the recent journey made by His Excellency into the Hinterland and along the boundary lines of the colony, especially with regard to the route of the proposed railway from Freetown to the most fertile districts.

ROBERT P. POOLEY,
Consul.

FREETOWN, SIERRA LEONE, *May 20, 1895.*

EXTRACTS FROM GOVERNOR CARDEW'S ADDRESS.

I consider it is only due to you that I should give you some account of the tour that I recently made in the protectorate. The tour covered about 600 miles by land, and the direction taken was governed principally with a view to ascertain the most profitable as well as practicable line for a railway.

On the map on the table the red line illustrates my recent tour, and the blue line, which I have had put in for the sake of reference, my tour of last year. You will observe that I followed the route of 1864 as far as Manjehun, thence took a line to the south and parallel with it to Kanre Lahun, passing through the Upper Mendi districts. From Kanre Lahun, I proceeded to Bandajuma, where I struck the 1894 route, and proceeded along it for three marches to Waima. From this place I took a more easterly route than in 1894, but met the latter route again at Sininkoro near Kintiballia, and proceeded along it for two marches to Koinadugu, where I again left it and passed through the Biriwa Limba country to Bumban, thence through the Lokko district to Karehna, where we have the headquarters of a company of frontier police, and thence to Kambia. I returned by water to Freetown, having been absent just sixty-seven days.

I am glad to say that peace prevails throughout the protectorate, and it is only along our border on the Liberian side that there are any disturbances; but these are confined for the most part to that side, but occasionally the theater of operations extends to our side. One raid has just been reported to me, but I am inclined to think it is an exaggerated report. These disturbances, or petty wars, have existed for at least four years, and until the Government of Liberia takes active measures to suppress them on their side of the frontier I fear they will continue. I need hardly say they have a disturbing effect on our own side, but the presence and action of the frontier police has done much to restore confidence, and such an instance as the raid just reported has not taken place for several years.

SUPPRESSION OF THE SLAVE TRADE.

I think I may safely say that the slave traffic has practically ceased within the protectorate. There may be instances of secret buying and selling of slaves, but the open traffic is no longer possible. This is mainly due to the augmentation of the frontier police to which your concurrence was asked last year. Concurrently with the reorganization of the frontier police, the protectorate was divided into five districts, in each of which a company is now quartered, and by means of detached posts and frequent patrols searching every road and bypath, the transit of slaves and their sale in open markets is practically impossible.

One very pleasing feature during my tour was to observe the confidence of the natives in the ability of the Government to maintain peace, and this was demonstrated everywhere I went, the countries which had been devastated by recent wars, and which I found completely deserted on the occasion of my tour in 1894, being now reoccupied. The Sanda-Lokko disturbances, which had so long prevailed, and which were only suppressed about July of last year and had left the Sanda country almost a desert, is now being fast repopulated, and I am informed that sixteen of the burnt towns have been rebuilt. There is such promise of an assured peace that I have rescinded the restrictions that were imposed last year within these districts for the sale of powder.

When there is such a promise of a settled and peaceful state of affairs, it is disappointing that it should not result in a greater flow of trade, but I think we must seek other causes than a decrease in the amount of produce exported. Judging from the customs revenue of last year, which I understand has never been so great since the colony was formed, the produce has in no sense decreased, but, as far more traders are engaged in commerce, there is a keener competition and a far smaller margin of profits all round. The great cause of depression is, I am informed, the heavy fall in kernels and oil, but I hope, as I shall endeavor to show later on, that this will not be permanent.

PROPOSED RAILWAY.

Turning to the consideration of the advisability of constructing a railway into the protectorate, my recent tour has quite confirmed me in the views I formed during my first journey of the general configuration of the protectorate, which is that along the coast line, and extending inland for distances varying from 70 to 100 miles, there is a belt of generally level country, after which it becomes very broken and hilly, the hills gradually increasing in height till they culminate in the mountain range which forms the watershed separating the basins of the Niger from those of the rivers flowing westward and southward into the Atlantic Ocean, so whether a railway were constructed in the direction reported on by Mr. Shelford, or due eastward or to the southeast, the question of traversing the broken and hilly country which forms the eastern portion of the protectorate must be faced if the railway is to be extended to tap the resources of that country, an object which should, I think, be the final purpose of any projected line.

This hilly country is so broken up and rugged that it does not need an expert to show that, unless some river valleys offering easy gradients exist along which a railway line could thread its length, the cost of overcoming the engineering difficulties entailed by penetrating

such a country would be quite prohibitive of the scheme. The only suitable valleys as far as I know are that of the Sehli or Rokelle River in the north, which would have to be entered to the south of Bumban, and that of the Moa or Sulima River in the south. Which of these valleys the line should follow, should be determined, I think, by the following considerations, which I propose to discuss *seriatim*: Characteristics of the natives, nature and fertility of the country and existing products and trade routes, capability of the country for development, and prospects of trade from countries outside the protectorate.

CHARACTERISTICS OF THE NATIVES.

With regard to the characteristics of the natives, I need not trouble you with a detailed statement concerning each tribe. It will be sufficient to say that, generally speaking, the tribes in the northern half of the protectorate are more intelligent and industrious than those of the southern half, which mainly consist of Mendis, who are not at all industrious and are very superstitious. Besides, those in the northern half are, if not Mohammedans, more or less under Mohammedan influence, so more temperate in their habits and reliable.

TRADE ROUTES.

With respect to the nature and fertility of the country and existing products and trade routes, the main trade routes through the protectorate are:

- (1) From Falaba by Bafodeya or Bumban; thence to Port Lokko.
- (2) From Matatoka, tapping the Kumki and the Sanda Lokko countries (the latter in the region of Karriyemma) thence by road to Benkia, on the Rokelle, where the produce is loaded in small canoes and transported to Magbilleh and thence transshipped in larger ones to Freetown.
- (3) From Mongheri, through Senahu, to Freetown.
- (4) From the Upper Mendi districts to Mafweh, Pujehun, and Bandasuma, respectively; thence by waterways to Bonthe, Lavana, Sulima, and Mano Salija.

As to the produce conveyed along these routes, by the first route, small quantities of ivory and gold from the interior, rubber from the interior, but also from Curanko, cattle in considerable numbers, kola nuts, small quantities of palm kernels, and oil, and rice, chiefly from the districts around Port Lokko; by the second route, palm kernels, rubber, benniseed, kola nuts, rice, etc.; by the third route, rubber and kola nuts, a little ivory, and a small quantity of palm kernels; by the fourth route, rubber, small quantities of kola nuts and ivory, and large amounts of palm kernels and oil.

Turning to the nature and fertility of the country, I think there is no doubt that the southern portion of the protectorate, which may be divided, roughly speaking, from the northern by an east and west line drawn through Port Lokko, is by far the most fertile and productive. In the northern portion, the country lying to the west of the range of the Warra Warra Limba mountains, which extend from Bafodeya to Bumban, is, generally speaking, open grass land with "scrub" well adapted for grazing cattle, but the soil is either light and sandy or mixed with gravelly laterite, and in some parts so little productive as not to be able to raise sufficient rice, which is their staple food, for the inhabitants. To the east of the range as far as our frontier, the country is richer, especially between Sininkore and Karriyemma, where it is under forests for the most part, in which the rubber vine abounds, but the valley of the upper waters of the Bagweh, Bagru, and Sehli rivers, which comprehend the Iraiya district, are not productive and are only very sparsely inhabited; and there is a broad belt varying from 20 to 40 miles running along the watershed which forms our northeastern frontier, which was swept bare by the Sofas within the last few years and is reported to be quite uninhabited.

There are no palm trees to the east of the Warra Warra Limba range, and these trees are very scarce to the west of it. The only district where they grow in very productive quantity is about Massumbu, where they were noticed by Mr. Bradford during his survey of the line to Bumban.

On the other hand, the southern portion may be said to be throughout rich and productive, especially in oil-bearing palms. The districts about Sherbre and all along the coast are famous for the amounts of oil and kernels which they yield. In some parts of the Bargru district, along the coast, the natives even complain that they are so numerous as to impoverish the land and that they can not in consequence grow rice, but these rich products are not alone confined to the lower districts; the Upper Mendi districts as far north as a line drawn from Mongheri to Kanre Lahun, and the Sana Konno district to the north of that line abound in palm trees, but only a small portion of the harvest they yield is gathered, in consequence of the distance from a market and difficulty of transport, and, as one chief informed me during my recent tour, because there are not enough people to pick the nuts. Besides, the forests yield rubber and many valuable woods such as konta and kamwood, which, of course, can not be utilized, owing to the difficulty of transport. In the district lying immediately north of the route from Senahu to Taninahu there are no palms, but at Senahu there is a rich belt which follows the valley of the Bumpe River.

CAPABILITY OF THE COUNTRY FOR DEVELOPMENT.

Though I believe that there is but little or no mineral wealth in the protectorate, and that we can never expect a sudden rise in the prosperity of the country, still I am of opinion that by judicious administration, a well-ordered and disciplined police force, particularly instructed to foster trade, the prompt suppression of any slave raiding or intertribal disturbances, and the encouragement of the natives by every means to reoccupy wasted and deserted districts, giving them where necessary seed rice to sow their farms, measures which I hope are being carried out, there will be a steady development of the resources of the country and a marked increase in the volume of trade. One means to these ends is obviously to encourage and instruct the natives in the cultivation of such products as are now left to nature to develop, but perhaps the foremost is to increase their wants; as long as they are few, it is obvious they will only produce just sufficient to supply them, but as they increase so will the products be forthcoming to obtain them.

It has been somewhere wittily remarked, that the secret of the development of trade is to cultivate in the native a taste for chartreuse. From an ethical point of view, this can hardly be justified, and, unfortunately, the native has already acquired an appetite for alcohol in the coarser forms of trade rum and gin, but the principle is sound and must result beneficially as long as it is applied to more useful and less demoralizing articles of commerce.

I was very much interested in observing during my recent tour how much was being accomplished toward this end at mission stations in the interior by means of industrial training and other civilizing agencies, but still more can be done by the traders themselves by pushing their trade further afield and carefully studying the requirements and tastes of the natives. The Upper Mendi, Kenno, and Kuranko districts furnish a wide field for commercial enterprise; the people are almost in their primitive condition. Manchester woven goods and cotton have scarcely found their way there, and it is most unusual to see in a crowd any one dressed otherwise than in native-made fabrics. On the other hand, where an article is offered which meets a felt want, it is surprising how quickly the natives acquire it. I found women using patent cotton carders of English or American manufacture in the remotest towns of the interior, where no other article of European commerce could be discovered, and observed large numbers of these articles being conveyed in the caravans passing from Freetown to the districts along the Niger hundreds of miles beyond our territory.

The eastern portions of the protectorate consist of highlands, with, on the whole, a bracing and salubrious climate, probably well adapted for the cultivation of coffee, ginger, and other valuable products. Another means for the development of trade and the resources of the country would be the settlement in these parts of natives, with capital, from Sierra Leone and the West Indies, who would be able to carry on such kinds of agriculture. The aborig-

live only for the present; they can not see the force of cultivating plants, such as the

coffee, for the fruits of which they must wait for a long period of three or four or more years. They are anxious for "quick returns." This may arise in a certain measure from selfishness and want of foresight on their part; but I think it is principally due to the conditions under which they have lived, owing to the slave-raiding habits of the people and to the envy and distrust with which chiefs regard any of their subjects who may be possessed with more than ordinary means. Though slave raiding has practically ceased, the chiefs still exercise despotic powers, hence there is no security of tenure, and from the fear of having their property confiscated at the will of the chief, the people are discouraged from making provision for the future, but I hope a closer control of native affairs by the Government will gradually do away with this feeling of insecurity. Already, I have observed in the Sanda Lokko and other districts, the cultivation of young kola trees along the approaches to the villages and towns, but this industry might be very much enlarged but for the influence I have referred to; and in the hands of enlightened natives, with capital, it might be made remunerative, for the demand for it is an increasing one.

PROSPECTS OF TRADE FROM COUNTRIES OUTSIDE THE PROTECTORATE.

The principal trade routes which exist from beyond the protectorate are those which enter it across our northern frontier through the French ports at Herimakunu and Wossu. On the eastern frontier between Herimakunu and Kanre Lahun, though certain routes cross into our territory, as by Kombili, which is east of Koinadugu, and by Sehamma and thence between the Tinki range and Mount Binsing, practically no trade passes along them owing to the deserted condition of the country bordering both sides of this frontier. From Kanre Lahun, a certain amount of trade is done with the interior at the markets in the Bandeh country, but, owing to the chronic state of warfare which exists between Chief Kailundu and the Kissi, Bandeh, and other chiefs, the trade is very languishing and intermittent.

Along the frontier on the Liberian side, from Kanre Lahun to the coast at Manoh Salija, there is a constant state of warfare, and the southern half of the border districts is a desert.

During my recent tour, there appeared to be a great revival of trade with the interior across our northern frontier, and the number of caravans that have come down are unprecedented; but the future prospects of this trade are very uncertain, and its continuance can not be counted on, nor have the products which have come down had such an effect as I had anticipated in relieving the depressed condition of the market. Considering how very sparsely inhabited the regions of the Upper Niger appear to be, it is possible that the interior trade from that direction is overrated.

The prospects of any trade with the hinterland of Liberia from Kanre Lahun or elsewhere along the frontier are most remote, owing to the chronic state of warfare which exists all along the Liberian borders.

Turning to the consideration of Mr. Shelford's report, my recent tour has more than convinced me of the desirability of projecting the railway through the Upper Mendi districts rather than toward Bumban—that is to say, through the southern portion of the protectorate rather than the northern. It might be admitted that the northern portion is on the whole inhabited by a more sober, industrious, and intelligent people, and a people a large number of whom are born traders; but on the other hand, the soil is less productive and the trade is more or less dependent on the produce which comes from the interior rather than from the soil itself, and the former is, as I have endeavored to show, an uncertain quantity. Again, such produce as does come down, and which, with the exception of the cattle, consists principally of rubber, gold, and ivory, is not of such a bulky nature as the products of the northern portion, which include palm kernels and oil and timber, and, therefore, its transport would not be so remunerative to a railway.

With regard to the cattle, it is doubtful whether it would be an advantage to transport them by rail. Again, the northern portion is not so capable, I think, of development by means of settlers as the southern, for, though it possesses higher land toward the east and

possibly a more salubrious climate than relatively similar parts of the southern portion, the soil is not so productive, as I have already stated.

On the other hand, there is no doubt that the southern portion, especially that part of it lying to the south of the road which passes from Freetown through Mongheri and Pangoma to Kanre Lahun is extremely rich in palm oil and kernels; its forests contain large quantities of useful and valuable timber, and the rubber vine abounds. Moreover, it appears to me that the southern portion offers the best prospects to settlers from Sierra Leone and the West Indies for the cultivation of coffee, kola nuts, etc., and for trade in timber.

For these reasons, I would prefer the railway passing through the southern portion rather than the northern.

RAILWAY ROUTES.

Turning to the consideration of the exact route which the line would follow, this could only be determined after a survey by a competent engineer; but during my recent tour I carefully observed the country through which I passed, and am of opinion it should follow the route which leads from Songo Town through Manjehun and Mano to Baoma or Koranko. With the exception of bridging the larger rivers, such as the Ribbi and Taia, there appear to be no serious engineering difficulties as regards the configuration of the country. From Koranko, my route passed over the range of the Kambui hills to Segbwema, a very hilly and difficult country, but I am informed that this range can be turned by a road which passes from Baoma through Wendeh into the valley of the Moa or Sulima River. This valley once gained, there would appear to be no great difficulty in carrying the railway as far as Kanre Lahun. The Ribbi River, which is navigable for steamers of the draft of the colonial steamer *Countess of Derby* some miles higher up than the point at which it would be crossed by the proposed line, would prove of great service for the transport of materials. The above route, while it would not interfere with the cheap and easy means of transport by the waterways through the Lower Mendi and Sherbre districts, would tap the resources of the Upper Mendi districts, at present quite undeveloped, owing, as I have already stated, to the distance from a market and the expense of transport.

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If there is to be a railway at all, whether in the direction of Bumban or through the southern portion of the protectorate, as I would recommend, I think Mr. Shelford's report shows conclusively the desirability of its commencing at Freetown and running for the first section to Songo Town, from which point it can be diverted in any required direction. Therefore, supposing there is to be a railway, the first section to be constructed is that between Freetown and Songo Town, and this work need not be dependent on the determination of the direction the line is to take beyond Songo Town.

With regard to the direction in which it will have to be constructed, Mr. Shelford's estimates for the whole of the main line from Freetown to Bumban, a distance of about 140 miles, the net receipt from existing traffic at £8,333 per annum, and taking the interest and sinking fund for the capital required for the light line at 5 per cent, he calculates that the annual deficit on the working of the railway at the outset will be £14,126. But, taking into consideration the greater productiveness of the southern portion of the protectorate, I hope, if the line extended through the Upper Mendi districts, that an increasing traffic would at once be developed and that there would not be such a heavy deficit from the outset. Besides these districts, and, indeed, the whole of the southern portion of the protectorate is more populous than the northern, and a certain amount of passenger as well as goods traffic may be anticipated. Whether the aborigines will take freely to railway traveling, is impossible to decide offhand as the experiment has not been tried in the colony, but we may be able to get information as to the extent to which use is made of the Senegal Railway by natives, and this information would be some guide to estimating the amount of passenger traffic that may be anticipated for a line in the protectorate.

With respect to the Sulima line, I was never at any time in favor of it, and it was projected before I came to the colony, and, as it appears from the letter from the Crown agents, the prospects of a remunerative return are so remote that I think we need not consider the question of its construction. The estimate for the length of this line, which is about 64 miles, is nearly twice as much as for the main line to Bumban, the length of which is about 140 miles.

FINANCES OF THE PROJECTED ROAD.

With regard to the nature of line and cost of construction, as it is the opinion of experts that a light line of 2 feet 6 inches gauge is best adapted for the requirements of this colony, I think their recommendations should be accepted, as well as the estimated cost of construction, viz., £133,767, which, together with a landing pier at Freetown at £15,000, amounts to £148,767, or, say, £150,000 in round numbers.

As to whether the line should be constructed by the State or by private enterprise, it is questionable whether there are any private individuals who would have sufficient confidence in the prospects of a railway in this colony to embark their capital in its construction, or to work it without a substantial guaranty from the Government; but apart from this consideration, I think it would be better from a political, as well as economical, point of view for the line to be constructed and worked by the Government. There would necessarily be less danger of friction with the natives of the protectorate, and I trust it would be more efficiently managed, though this latter statement may be open to question.

As to administration, admitting the railway to be a State one, its administration would form a separate department of government, and, considering the entire ignorance of the working of a railway which must prevail in this colony, as pointed out in the letter from the Crown agents, the question of administration is a great difficulty. In the absence of technical or practical training, which has never existed in this colony, there are but few, if any, skilled workmen available for the duties of foremen of workshop or plate laying, but I think guards could be obtained from the police and from time-expired men of the West India regiments in garrison and possibly skilled workmen and engine drivers from the West Indies, though I fear not without the payment of a high rate of salary.

With regard to working expenses, Mr. Shelford calculates that the net traffic receipts for the section of the line to Songo Town shortly after the completion of that section will amount to £2,608, which will be available for interest on capital.

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As there is every reason to suppose the presence of a railway would develop the produce of the country, we may assume the traffic would be an increasing quantity.

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The estimated cost of a light line to Songo Town is £133,767, and of a landing pier at Freetown £15,000. These two amounts added together make £148,767, or, say, in round numbers, £150,000, and this sum would probably have to be borrowed by the Government.

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With regard to the advantages and disadvantages to the colony that would result from a railway, I think it may be safely maintained that a railway is bound to develop what products there may be in the country through which it passes.

PROSPECTS OF RAILWAY TRAFFIC.

The question then arises whether these products are of sufficient value and quantity to give a remunerative return for the railway. From my own knowledge of the Mendi country, and from the information I have gathered from traders, both European and native, and from the aboriginal natives, I am of opinion the product exists in large quantities and only require cheap means of transport to reach the markets at Freetown or elsewhere, but as to the value, I regret to say that is an uncertain factor in the calculation, for there has recently been a very heavy fall in the price of palm kernels and oil, amounting to as much as 25 per cent,

and as these products form by far the greater part of the export trade, the revenue for the current year has been seriously affected by the fall in prices, but I hope this fall may not be permanent. By some it is attributed to the prolonged and extreme cold weather in England last winter, which prevented these products from being manipulated, but by others to the importation of increasing quantities of grease and fat from New Zealand, China, etc. However, I am also informed that there is every probability of an increased demand for them from the United States, where their manipulation which has hitherto not been attended to for want of requisite machinery, will probably be now taken in hand. For the above reasons, there are good grounds for supposing the prices will rise again, but in the meantime, in view of the existing great depression in the trade, the serious risk to the finances of the colony of embarking on a railway scheme must be taken into consideration.

As regards the revenue of the colony, owing to the increased business that would arise from the construction of a railway and its use, I think we may assume that it will increase, thus bringing gain to the colony; but against this must be set the low traffic returns that may obtain if there is a continued depression in the market for palm kernels and oil. In addition to the possibility of working the railway at a loss, there is also the incubus of the annual payment, commencing with £9,000 for the interest and sinking fund on the capital of £150,000 required for the first section of the line. But notwithstanding these possible liabilities in the future, I am inclined to the opinion that the enterprise should be undertaken if only for the purpose of developing additional industries in the protectorate, such as the cultivation of coffee or ginger, which would, in a measure, take the place of palm kernels and oil should the price of the latter permanently fall in consequence of a lessened demand. This is a possibility that has to be faced, and, in the event of its happening, unless there is some other staple industry to substitute for it, it would mean ruin for the finances of this colony.

RECENT TRADE OF SIERRA LEONE.

The number of arrivals of United States shipping (all sailing vessels) at Freetown from July 1, 1894, to June 30, 1895, was 9, of the aggregate tonnage of 3,482. The total tonnage of vessels of all nations entered during the year 1894 was 515,700 (mostly steamers), being an increase of 78,881 tons over the previous year.

The number of steam vessels, including coasters, entered during 1894 was 429; sailing vessels, including coasters, 354.

The public revenue for 1894 was £103,694 (\$504,575); expenditures, £93,100 (\$423,025).

The number of births registered was 1,323; deaths, 2,250. The death rate per 1,000 was 19.86.

The rainfall for 1894 was 141.26 inches.

The imports direct from the United States during the financial year under review were, say, 7,700 barrels of flour, 1,300 barrels of biscuit, 1,056 half hogsheads and 1,056 cases of leaf tobacco, 13,000 cases of kerosene, and 1,150,000,000 feet of lumber. In addition to these are sundries, consisting of cotton cords, cotton duck, rope, hardware, salted and canned provisions, furniture, clocks, oars, spars, florida water, medicines, organs, lard, butter, cottoline, sewing machines, sugar, rum, etc.

The total declared value of direct imports was, say, \$154,000.

As a supplementary report on imports from the United States, I might add that about 1,000 barrels of flour, 300 barrels of biscuit, 100 half hogsheads of tobacco, and 2,000 cases of kerosene reached the colony via Europe and the Canary Islands.

The total exports from this colony to the United States direct and via Europe for the same period amounted to \$31,000, consisting of bullock hides and horns, ginger, coffee, and kola nuts.

The total value of imports from all sources for the year 1894 was £478,024 (\$2,326,065), and the total value of exports. £426,499 (\$2,075,344). The volume of trade for 1894 equaled £904,523 (\$4,401,409). The increase in value of imports, as compared with the previous year, was £60,559 (\$294,680), and of exports, £27,835 (\$135,445). The volume of increase in 1894 equaled £88,394 (\$430,125).

INCREASE IN THE KOLA-NUT TRADE.

Since my special report to the Department on the kola nut,* the export has steadily increased, but the movement tends rather to the European than to the American markets. The writer is constantly receiving communications on the subject, and feels sanguine that the trade in this useful product bids fair to become developed to a much greater extent at home as the medical properties of the article become more familiar by chemical manipulation.

CONSUMPTION OF AMERICAN PRODUCTS.

American flour only is used in the colony, and the importation increases year by year. This may also be said of tobacco, lumber, and kerosene, as a matter of course.

INCREASE OF LICENSE TAX.

There has been no alteration whatever in the customs tariff since my last annual report, but a draft of an ordinance has been published increasing the Government tax for licenses from £75 to £100 per annum, and limiting the sale of spirituous liquors in the colony, no dealer to sell more than one case to the same individual. It is not so long ago that the duty was increased by 50 per cent, and it would appear that the Government is desirous of reducing the traffic to the lowest possible limit.

INTEREST IN THE RAILWAY PROJECT.

Since the governor's recent tour into the interior of the colony and to its boundaries, reported in my dispatch dated May 20, 1895, increased interest is being aroused in the matter of the proposed railway, and it is now a foregone conclusion that this scheme, which is so essential to the future prosperity of the colony will be carried out by the Imperial Government.

* Printed in CONSULAR REPORTS No 171 (December, 1894), p. 532.

INDUSTRIAL TRAINING SCHOOL.

A school is now in course of erection in Freetown for technical education and training of the natives, to which it is in contemplation to annex a Young Men's Christian Association. Funds for this laudable undertaking have been raised, partly in England, assisted to a considerable extent by a grant from the local government for building and maintenance.

AGRICULTURAL EXHIBITION.

It is proposed to hold an agricultural exhibition in Freetown early in January, 1896, when prizes will be awarded for the best specimens of native products, such as palm oil, palm kernels, rubber, ginger, coffee, cassava, benne seed, rice, copra, cotton, yams, sweet and Irish potatoes, corn, kitchen vegetables, farm and domestic animals, dairy products, poultry, and farming implements, native and foreign. Great hopes are entertained that as a result of this exhibition and others to follow, more earnest and far-reaching efforts will be directed to the cultivation of the land and the search for mineral wealth, which, in the too ardent and now profitless pursuit of shopkeeping and street hawking, has been so lamentably neglected since the foundation of the colony over a hundred years ago.

PROSPECTS FOR UNITED STATES TRADE.

There seems to be a probability that in the near future Sierra Leone may become a fairly good customer for American agricultural implements, machinery for hulling coffee and rice, cleaning cotton, and crushing palm kernels; also, other labor-saving machinery, as industries become more developed and the primitive means of transportation—canoe and head load—are superseded by the iron horse and the steam launch.

ROBERT P. POOLEY,
Consul.

FREETOWN, SIERRA LEONE, *July 1, 1895.*

REAL-ESTATE MORTGAGES IN RUSSIA.

Believing that some statement of the extent to which lands and buildings, privately owned, in Russia are mortgaged may be of interest, both as giving a basis for estimating the value placed upon the land and the thrift of the people, I have the honor to submit the following report upon the subject. This report is compiled from official statistics and is, I believe, fairly reliable. The figures which I am able to obtain are not later than January 1, 1893, it not being the practice of the Imperial Government to bring such data down to the time of publication.

The tenure of land in Russia is of three classes, viz, that of the Crown, that of the communes, and that of private landed proprietors, the latter only being mortgaged.

There are in Russia some thirty-six mortgage banks which are established for the sole purpose of issuing loans upon real estate. The following is a list of these institutions and the year of their establishment:

(1) *Institutions belonging to the Government.*—The Nobility Land Bank, 1886; Special Section of the Nobility Bank, 1886; Peasants' Land Bank, 1883.

(2) *Private institutions in European Russia.*—Land Bank of the Province of Kherson, 1864; Bank of Kharkoff, 1871; Bank of Poltava, 1872; Toula Bank of St. Petersburg, 1872; Bank of Moscow, 1872; Bank of Bessarabia, 1872; Samara Bank of Nijni-Novgorod, 1872; Bank of Kieff, 1872; Kostroma Bank of Yarosleff, 1873; Bank of Vilna, 1872; Bank of the Don, 1873; Bank of St. Petersburg City Credit, 1861; Bank of Moscow City Credit, 1863; Bank of Odessa City Credit, 1871; Bank of Cronstadt City Credit, 1875; Bank of Kieff City Credit, 1885; Land Credit Society of Poland, 1825; Bank of Warsaw, 1870; Bank of Lodz, 1872; Bank of Lublin, 1885; Bank of Kalische, 1886; Bank of Plotsk, 1887; Bank of the Nobility of Esthonia, 1802; Bank of the Nobility of Livonia, 1803; Bank of Courland, 1832; Bank of Riga, 1866; Mortgage Bank of Riga, 1869; Bank of Reval, 1869; Mortgage Bank of Courland, 1875; Bank of Livonia, 1884; Land Bank of the Nobility of Tiflis, 1875; Land Bank of the Nobility of Koutais, 1876; City Credit Bank of Tiflis, 1881.

Except the Government banks, the territory in which these institutions may make loans is restricted by law, only two banks being permitted to operate in the same province at the same time.

The following is a statement of the mortgages held on land and buildings on January 1, 1893:

Territory.	Loans on land.	Loans on buildings.	Total.
	<i>Rubles.*</i>	<i>Rubles.*</i>	<i>Rubles.*</i>
Russian Europe.....	940,623,742	469,645,969	1,410,269,711
Baltic provinces.....	63,274,651	28,813,924	92,088,575
Poland.....	115,097,525	45,749,026	160,846,551
Caucasus.....	12,102,128	20,564,968	32,667,096
Total.....	1,131,098,046	564,773,887	1,695,871,933

* The "paper ruble"—officially called "credit ruble"—is the actual currency in Russia, in which all general business and other commercial values throughout Russia are estimated, unless otherwise specified. In my report of May 15, I stated the valuation of the paper ruble at 52.1 cents, but at that time it was quoted at 0.675 in gold, and, accordingly, my figures were correct.—Consul-General Karel, in CONSULAR REPORTS No. 180 (September, 1895), p. 21.

On 114,136,500 dessiatines* of land, which in the sixty-six provinces belong to private persons, there were mortgaged January 1, 1893, 102,313 estates covering an area of 46,322,286 dessiatines, or nearly 41 per cent of the total area. The estates thus mortgaged have been estimated by the banks to have a value of 2,204,639,126 rubles, and the aggregate amount

* 1 dessiatine=2.6997 acres.

loaned upon them was 1,214,149,281 rubles, of which on January 1, 1893, 1,131,098,046 rubles remained unpaid.

The manner in which the loans on land, not including buildings, are divided among the banks is exhibited, together with other interesting data, in the following table:

Banks.	Number of estates mortgaged.	Area.	Estimated value of properties.	Total amount issued.	Balance of loans remaining unpaid.
		<i>Dessiatines.</i>	<i>Rubles.</i>	<i>Rubles.</i>	<i>Rubles.</i>
Shareholding banks.....	25,278	15,722,969	623,576,000	339,629,000	324,397,000
Land Bank of Kherson.....	3,740	3,187,929	193,475,000	96,737,000	80,117,000
Nobility Land Bank.....	11,597	9,605,405	573,578,000	326,873,000	319,473,000
Peasants' Land Bank.....	9,339	1,700,775	70,316,000	53,759,000	49,630,000
Special Section of Nobility Bank..	7,771	5,933,893	284,988,000	174,482,000	169,631,000
Land Bank of Saratoff-Simbirisk (now in liquidation).....	157	316,924	5,470,000	2,548,000	2,218,000
Bank of Nijni-Novgorod.....	537	125,510	6,864,000	4,728,000	4,675,000
Banks in the Baltic provinces....	33,374	5,523,193	150,434,000	81,150,000	63,275,000
Banks in Poland.....	9,238	3,713,647	283,743,000	128,509,000	113,783,000
Banks in the Caucasus.....	1,282	492,041	12,195,000	5,734,000	3,899,000
Total.....	102,313	46,322,286	2,204,639,000	1,214,149,000	1,131,098,000

In two hundred and seventy towns, as shown in the table below, 44,059 buildings on estates are mortgaged, having an estimated value of 1,209,511,204 rubles, and insured for a total amount of 1,094,730,802 rubles. The amount of loans granted on these buildings was 752,578,750 rubles, and on January 1, 1893, the outstanding amount still due to the banks was figured at 564,774,000 rubles.

Of the total amount of loans included in this table, 326,000,000 rubles remain due on real estate in St. Petersburg and Moscow. Outside of these two capitals, the sums loaned on town property have been greatest in Odessa, Warsaw, Riga, Kieff, Tiflis, Kharkoff, Lodz, and Vilna, in each of which upwards of 5,000,000 rubles have been loaned.

Banks.	Number of estates mortgaged.	Estimated value.	Amount of insurance on property.	Total loans issued.	Balance of loans unpaid.
		<i>Rubles.</i>	<i>Rubles.</i>	<i>Rubles.</i>	<i>Rubles.</i>
Shareholding land banks.....	14,329	225,150,000	202,997,000	119,988,000	100,894,000
Bank of Saratoff-Simbirisk (in liquidation).....	109	1,533,000	1,219,000	788,000	308,000
Bank of the Nobility of Nijni-Novgorod.....	758	7,505,000	8,010,000	4,326,000	4,186,000
Nobility Bank of Tiflis and Koutais	2,290	28,258,000	20,555,000	16,027,000	9,951,000
6 city credit companies of European Russia.....	15,917	705,012,000	681,921,000	510,445,000	367,190,000
5 city credit companies in Poland.....	4,090	155,790,000	97,131,000	57,467,000	45,749,000
5 city credit companies in the Baltic provinces.....	5,707	69,480,000	67,036,000	35,048,000	28,814,000
City Credit Bank of Tiflis.....	856	16,783,000	15,862,000	8,499,000	7,682,000
Total.....	44,056	1,209,511,000	1,094,731,000	752,588,000	564,774,000

The estimated town population of Russia, including only European Russia, Poland, and the Caucasus, is 12,759,303, so that it appears that the amount of debt upon town real estate averages about 44.25 rubles per capita.

The rural population of the same extent of country is estimated at 71,760,425, making the debt upon rural real estate about 13.40 rubles per capita.

The table giving mortgages on rural property shows that the average debt is 24.72 rubles per dessiatine, while the valuation at an average placed upon the land by the banks is 47.65 rubles per dessiatine. The estimate made by the Department of Agriculture and Rural Economy gave, in 1889, an average value of 71 rubles per dessiatine for the same territory. This latter, however, covered only farming lands, while forests form a considerable part of the large landed estates.

The latest returns for fifty governments of European Russia, exclusive of Poland, show the following distribution of land, including communal, state, Crown, and church, as well as private lands: Arable and fallow lands, 106,666,453 dessiatines; meadow, 64,806,253 dessiatines; forest, 157,616,608; waste, 77,807,613 dessiatines; total, 406,896,927 dessiatines; or, not including waste land, 339,089,314 dessiatines, which, if valued at 47.65 rubles, would have a total value of 16,535,000,000 rubles; but if the arable and meadow lands are valued according to the average given by the Department of Agriculture and the forest land at 30 rubles per dessiatine, the result would be about 17,000,000,000 rubles.

Mortgages are effected through the mortgage banks, or *banques foncières*, which are organized under several different forms, but except that those belonging to the Government are officially administered, and have certain privileges, they are, in effect, the same in regard to the manner of performing their functions.

Apart from the Government banks, the great majority of loans on real estate are made by joint-stock or shareholding banks, and as the constitutions of these institutions may be of interest, I append hereto an abstract of the rules under which the Toula Bank of St. Petersburg, one of the largest and most prominent of them, is organized and operates. All operate under practically the same rules.

All the mortgage banks are permitted to issue bonds to the extent of ten times the amount of their capital, but not in excess of their loans on real property. These bonds are secured by the entire resources of the bank, and are paid to the borrower at par. As they generally are at a slight premium in the market, it is often possible for the borrower to gain a slight advantage by paying his indebtedness in cash, although he has the privilege of paying in bonds if he desires, and, indeed, the endeavor is to induce him to do so. The interest on these bonds ranges from 4 to 6 per cent, but by far the larger proportion bear 5 per cent, except that those payable in gold bear $4\frac{1}{2}$ per cent.

That these institutions are profitable, is shown by the inclosed clipping from the Journal de St. Petersburg of June 12, 1895, showing the current

quotations for the shares of some of these banks. The par value of these shares is 250 rubles, and the advance is due to the large dividends paid.

The operation of these banks does not materially differ in principle from the *banques foncières* (land banks) of Germany and France, I believe.

The investors in the obligations of these institutions are secured not by individual mortgages on specified parcels of real estate, but by the entire resources of the bank, including all the mortgages held by it. On the other hand, the banks with their resources are able, in case a debtor is in default with his interest, owing to unforeseen exigencies, to prolong, under certain conditions, the time for payments, without the foreclosure of the mortgage or the sacrifice of the estate, and still without default of interest on the bonds.

It might be found that institutions of a similar character, so modified as to conform more nearly with American business methods and principles, would fill a want in our own country as offering to our farmers a system under which they could obtain loans on their properties on a more elastic basis than at present, and to the investors most of the advantages of investments in real securities without the risk which certain periods of great stringency have proved to be attendant upon farm mortgages.

ROBERT H. D. PIERCE,
Chargé d'Affaires ad interim.

ST. PETERSBURG, *June 12, 1895.*

QUOTATIONS OF MORTGAGE-BANK SHARES.

[From the Journal de St.-Petersbourg, June 12, 1895.]

Land banks, shares, and bonds.	Bid.	Price asked.	Sales.
Land Bank of Kharkoff.....	518	525	521 to 522
Land Bank of St. Petersburg-Toula.....	413	418	416 to 417
Bank of Poltava.....	630	640	630 to 635
Bank of Samara Nijni-Novgorod.....	710	.....	.....
Bank of Vilna.....	625	630	.....
Bank of the Don.....	.....	800	.....
Bank of Bessarabia-Taur.....	698	702	.....
Bank of Kieff.....	.....	820	.....
Bank of Moscow.....	.....	725	.....

OPERATIONS OF THE ST. PETERSBURG-TOULA BANK.

The operations of the St. Petersburg-Toula Bank are limited to lending money on land estates and buildings.

(Remark.) When the bank lends money on buildings, whether of stone or of wood, the same must be insured against fire.

Loans are granted exclusively on estates free from all debts, or with the understanding that such debts, if any exist, shall be paid off with the money loaned by the bank, or if the creditors of the person asking for the loan agree that from the money lent by the bank shall be paid off by the estate prior to any other debts.

Estates upon which the bank has lent money may be mortgaged (having first informed the bank of same) for additional sums to private persons, but with the understanding that the bank has the first right on the estate, in case of failure to pay.

The manner of annuity is decided mutually between the director of the bank and the Ministry of Finance.

Estates mortgaged to the bank may be transferred from one person to another, by way of will, gift, or sale, but not otherwise than with the transfer of the debt and obligations connected with the bank. Acts for the transfer of the estate from one person to another require the following information from the bank, namely, (1) the amount due to the bank, which must be transferred to the new owner; (2) the amount of arrears, which must be paid up immediately; and (3) whether the estate has not been published for sale for arrears due to the bank. In order to divide an estate mortgaged at the bank, the consent of the bank must be obtained.

Mortgages are granted on long and short terms.

Short-term mortgages may be granted by the bank on estates already mortgaged on the long term, observing the regulations expressed in paragraphs 38 to 40 of the statutes and on the following conditions: (1) Short-term mortgages are granted in the limits of 10 per cent of the estimated value of the estate, while the total mortgage debt must not exceed 60 per cent of the estimated value of the estate, and (2) short-term mortgages may be granted on estates (section 11) free from any other debts, with the exception of the debt to the bank, or when the private creditors, if any exist, agree that the debt of the bank shall have precedence before any other debts.

Should the value of the estate decrease, owing to the fault of the owner, the bank has the right to demand the restitution of the proportionate amount of the mortgage even before the expiration of the term fixed for the full restitution of the mortgage; if the owner fails willingly to fulfill the claim of the bank, the latter has the right to bring a lawsuit against the estate owner for the amount due in proportion to the loss sustained in the estimated value of the estate.

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SECTION 16. Persons desiring to mortgage their estates must present to the bank (1) the proper certificate proving possession, and showing at the same time whether the estate is clear of disputes, lawsuits, etc.; (2) a plan of the estate, if any exists; and (3) a detailed inventory with estimation of the estate. Persons desiring to receive money on buildings must present, besides the above-stated documents, the insurance policy, which is kept at the bank.

SEC. 17. When an estate is mortgaged, the direction of the bank informs the notary of the same, and lays arrest on the estate for the mortgage amount.

SEC. 18. Buildings which have been included in the estimated value of the estate must, until the bank's debt has been paid off, be insured by the owner of the estate each year against fire, and the insurance policy must be made in the name of the bank, and in case of fire the bank will retain from the amount recovered from the insurance company such sum necessary to cover the mortgage on the building. But if the landowner presents a guaranty to the effect that the sum recovered from the insurance company for the building destroyed by fire will be employed by him to renew such building, and if the administration of the bank finds the guaranty to be sufficient, it may then turn over to said owner the full amount recovered from the fire insurance company.

SEC. 19. If the landowner does not pay up in time the mortgage annuity (section 34), six months' time is granted him, for which he has to pay one-half of one per cent on the first two months and one per cent for the remaining four months on the arrear amount, each part of a month to be counted as a whole month.

In case the mortgaged estate should, through some calamity, give no revenue, or should the landowner die, the bank administration offers the landowner the privilege in the payment of the annuities at the fixed time. The payment of said annuities may be extended for three years, for not more than two half-yearly payments, with the obligations of the owner during

the three-year period to pay them off in equal half years or at the end of a year. For arrears or amounts allowed to be paid later, the owners must pay 6 per cent instead of the stipulated fine.

At the expiration of the time granted as an ordinary or extraordinary privilege, in case the owner does not pay the annuities regularly or fails to fulfill the obligations undertaken by him, for the privilege granted to him by the bank, the latter brings a suit against said mortgaged estate in the order stated further on in the present statutes.

SEC. 20. If during the privileged period all arrears, including in this amount the insurance paid by the bank, based on section 41, are not paid up, the administration publishes the property for sale by advertisements in the official and local papers, at the expense of the estate owner, fully describing the estate, its locality, and the name of its owner, but without fixing the day of sale. From the time of the publication, the administration has the right to verify the inventory of the estate to be sold, in the presence of its owner or his representative, and in case of the absence of both, in the presence of a sheriff or a police officer.

SEC. 21. Six weeks after the expiration of the privileged term granted, and at least up to a month from day of sale, three publications are made in the periodical papers, stating the dates of the first and second sale, the number of acres of land, in accordance with documents in hand, the amount of capital debt on the estate to be sold up to the date of sale, for which the sale of the property is published, arrears and all expenses due to the bank, and other information required by law.

SEC. 22. The landowner is allowed to pay up arrears due to the bank, including fines for extension of time, up to the beginning of the first sale, and if such first sale does not take place up to the second sale, and thus free the estate from sale.

SEC. 23. The sale of the estate takes place at the decision of the administration at the administration office itself or at one of the public places, which the law has instituted for this purpose.

SEC. 24. The sale is opened by presenting the bill of sale (*Teuille de Vente*), which must include all the information contained in the advertisements, with all additions or alterations which have been proved up to day of sale, as well as the amount of arrears due to the bank, together with the fines due on same. The same begins from the amount of arrears due to the bank, together with such arrears as may be due to the Crown (or town dues), and such expense as the bank may have made for the advertisement of said estate for sale. To the purchaser is transferred the amount for which the estate is mortgaged, together with the privileged arrears due to the bank and the fines thereon. Persons desiring to purchase are obliged before the beginning of the sale to prevent security, equal to the amount, from which the sale will begin. The security must be in cash or Government bonds or securities guarantied by the Government or mortgage bonds.

SEC. 25. The sale is recognized as having taken place if two purchasers have made bids exceeding the amount at which the sale was begun (section 24). The amount offered at the sale with the deduction of the amount presented as security in accordance with section 24, as well as the amount to be paid as duty for the "purchase act" of the estate, must be paid into the bank by the purchaser within fourteen days from date of sale.

SEC. 26. Should the first auction fail, a second and final auction is fixed to take place in fifteen days. If the second and final auction fails to find a purchaser, the estate becomes the property of the bank, which must sell such estate within one year either by auction or for the price privately offered.

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SEC. 28. The amount of arrears due by such estate to the bank, if not recovered from sale of such estate, must be paid to the bank out of its reserve fund.

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Long-term mortgages.

SEC. 32. Long-term mortgages are issued (1) on land (estate) for 61 years and 8 months, 51 years and 9 months, 48 years and 8 months, 38 years and 4 months, 31 years and 2

months, 29 years and 9 months, 20 years and 7 months, 19 years and 11 months, 17 years, 16 years and 6 months, 14 years and 5 months, 14 years and 1 month. 12 years and 7 months, 12 years and 3 months, 10 years, 9 years and 10 months; and (2) on buildings in cities for 38 years and 4 months, 36 years and 4 months, 31 years and 2 months, 29 years and 9 months, 20 years and 7 months, 19 years and 11 months, 17 years, 16 years and 6 months, 14 years and 5 months, 14 years and 1 month, 12 years and 7 months, 12 years and 3 months, 10 years, 9 years and 10 months.

(Remark.) This is the latest change made. The terms and percentages contained in the former text of this paragraph were somewhat higher.

SEC. 33. For long-term mortgages, the bank issues mortgage bonds at their nominal price, but it may, by special mutual agreement with the borrower, undertake to sell the mortgage bonds at the highest price offered, charging therefore commission at the rate fixed by the administration of the bank, this rate not to exceed one-fourth per cent. Any change on the rate of commission for such above-named sale must be published in advance.

SEC. 34. For long-term mortgages, the borrower is obliged to pay every six months on the money borrowed, as follows: For terms of 61 years and 8 months, 48 years and 8 months, 36 years and 4 months, 29 years and 9 months, 19 years and 11 months, 16 years and 6 months, 14 years and 1 month, 12 years and 3 months, 9 years and 10 months at the rate of $2\frac{1}{2}$ per cent; for terms of 57 years and 9 months, 38 years and 4 months, 31 years and 2 months, 20 years and 7 months, 17 years, 14 years and 5 months, 12 years and 7 months, 10 years at the rate of $2\frac{1}{4}$ per cent. For amortization of capital of mortgage for 61 years and 8 months, at the rate of one-eighth of one per cent; 51 years and 9 months and 48 years and 8 months, at the rate of one-fourth of one per cent; 38 years and 4 months and 36 years and 4 months, at the rate of one-half of one per cent; 31 years and 2 months and 29 years and 9 months, at the rate of three-fourths of one per cent; 20 years and 7 months and 19 years and 11 months, at the rate of $1\frac{1}{2}$ per cent; 17 years and 16 years and 6 months, at the rate of 2 per cent; 14 years and 5 months and 14 years and 1 month, at the rate of $2\frac{1}{2}$ per cent; 12 years and 7 months and 12 years and 3 months, at the rate of 3 per cent; 10 years and 9 months and 10 years, at the rate of 4 per cent.

Besides interest on the capital and amortization, the borrower is obliged to pay every six months, on all the above mortgages for the formation of the bank's reserve fund (section 97), for shareholders' dividends (section 95), and to cover the administration expenses of the bank, interest calculated as follows:

(a) On loans granted on land up to the 1st of July, 1894, one-half of one per cent on the money borrowed; from the 1st of July, 1894, during ten six months' periods, this rate is decreased each six months by one-fortieth of one per cent on the money borrowed, so that from the 1st of January, 1899, the borrowers pay for the benefit of the bank not more than one-fourth of one per cent each six months, until they have paid off one-tenth of the mortgage. Further, having paid off one-tenth, this rate, until the second tenth of the debt is paid off, is charged at nine-tenths of the above-named one-fourth of one per cent tax; after paying off two-tenths of their debt, they pay at the rate of seven-tenths, and so on until the full settlement of the debt.

(b) On mortgages for terms of 61 years and 8 months, granted on land up to the 1st of January, 1897, is levied three-eighths of one per cent half-yearly payments; from the 1st of January, 1897, during five half years, this payment is decreased each half year by one-fortieth of one per cent; from January 1, 1899, this rate will be as for other mortgages, as shown in paragraph (a) of the present article.

(c) On mortgages granted on land, beginning on the 1st of July, 1894, must be paid not more than three-eighths of one per cent per half year; from the 1st of January, 1895, this rate is decreased each half year by one-fortieth of one per cent, which decrease corresponds to the amount of amortization of each tenth part of the debt, as shown in paragraph (a).

(d) For mortgages granted on property in towns, the borrowers pay an amount not to exceed one-half of one per cent every half year on the debt, this rate to be decreased each time a tenth part of the debt is paid off, as shown in paragraph (a).

To cover the cost of estimating the estate and of the mortgage blank, one per cent of the mortgage amount is retained at the same time that the mortgage takes place.

SEC. 35. The payments stipulated in the foregoing paragraph must be made each half year, not later than June 30 and December 31. These payments, besides being made in cash, may be settled by canceled bank mortgage bonds or coupons of such bonds, which have become due at the date of payment.

SEC. 36. The borrowers, at all times, besides making the obligatory payments in the proportion stipulated (section 34), may return the amount of debt remaining on long-term mortgages before the expiration of the term, in parts, such parts not to be less than 100 rubles and in round hundreds or in totality, by means of the bank's mortgage bonds at their nominal price. But if, in order to pay off the mortgage before the expiration of the term the borrower pays in cash, he is then obliged, besides the capital, to pay in interest on same whatever he would have had to pay up to the expiration of the amortization of the capital a proportionate number of mortgage bonds.

SEC. 37. A remortgage of the estate by renewing the long-term mortgage is allowed when one-fifth of the mortgage has been paid off, on the same conditions on which the first mortgage was issued. In this case, the bank charges for its benefit one per cent premium on the supplementary amount.

Short-term mortgages.

SEC. 38. Short-term mortgages may be granted for terms of from one to three years, according to the decision of the administration.

SEC. 39. Short-term mortgages are granted in cash from the free money formed from such revenues, which, for this purpose, is separated by the general assembly; from the percentages coming from the capitals of foundation and reserve (sections 2 and 97); from the revenues of estates which have become the property of the bank (section 27); from sums obtained over and above the debts of certain estates which have become the property of the bank, and also from such part of the foundation capital, which it is not by law necessary to deposit in the imperial bank in Government bonds (section 52 and remarks).

SEC. 40. The rate of percentage and conditions of reimbursement of capital on short-term mortgages are decided by the administration, and are published in advance in the Official Messenger (paper) and local provincial papers.

CHAPTER III.

Sections 41, 42, 43, 44, 45, and 46 treat of the insurance of buildings in favor of the land bank.

CHAPTER IV.

SEC. 47. Estimation and revaluation (sections 48 to 50) of estates to be mortgaged in the bank on the presentation by the owner of the inventory (section 16) takes place on special instructions decided by the administration of the bank and confirmed by the general assembly (section 88, paragraph 6).

SEC. 48. For the basis of estimation of estates must be taken the revenues of the estates, defined by the conditions of the rental of such estate, renting of land, contracts for revenues of estates and other information (distilleries, sugar refineries, etc.).

SEC. 49. The estimation inventory presented by the owner is verified by special instructions confirmed by the general assembly and by the estimating committee, and is then presented to the administration, which may diminish the estimation of an estate or refuse a mortgage on such estate altogether, but can not increase the amount of mortgage to be granted on an estate when such amount has been decided by the estimating committee.

SEC. 50. The same order of things is pursued in renewing mortgages.

SEC. 51. If the amount obtained from the sale of an estate does not cover the debt owed to the bank, the loss is laid to the bank and is covered in the manner stipulated in section 28. The persons who made the first estimation are responsible besides this, both personally

as well as their property, as voluntary neglect in estimating. The degree of guilt of the estimation is decided by the court.

CHAPTER V.

Mortgage bonds.

SEC. 52. The amount issued in circulation of mortgage bonds must not exceed the amounts effected by the bank on long-term mortgages on land estates, and must not exceed more than ten times the foundation capital and reserve fund of the bank.

(Remark 1.) Part of the foundation capital, forming one-twentieth of the amount of mortgage bonds in circulation, must be kept in Government bonds or bonds guaranteed by the Government, easily realized and bearing interest.

(Remark 2.) Sums at the disposal of the bank and not requiring immediate placement, must be composed of cash and kept in the cash of the bank or deposited at the imperial bank or changed into Government bonds or obligations guaranteed by the Government.

SEC. 53. Mortgage bonds are issued to bearer and may be transmitted from hand to hand.

(Remark.) The owner of mortgage bonds are allowed to deposit them for safety with the cashier of the bank. In this event, instead of mortgage bonds, the owner receives nominal receipts, as per blank forms confirmed by the administration.

SEC. 54. Mortgage bonds are issued at the value of 100, 500, 1,000, 5,000, and 10,000 paper rubles, or at 125 metallic rubles, equal to £20, 500 francs, 236 Dutch guildens, and 134 Prussian thalers.

SEC. 55. Mortgage bonds are issued twice a year, on the 2d of January and the 1st of July, in series according to the condition of the loans.

SEC. 56. Mortgage bonds issued on mortgages for 61 years and 8 months, 48 years and 8 months, 36 years and 4 months, 29 years and 9 months, 19 years and 11 months, 16 years and 6 months, 14 years and 1 month, 12 years and 3 months, and 9 years and 10 months, bear 5 per cent interest; mortgage bonds for 51 years and 9 months, 38 years and 4 months, 31 years and 2 months, 20 years and 7 months, 17 years, 14 years and 5 months, 12 years and 7 months, and 10 years, bear $4\frac{1}{2}$ per cent interest. Interest on mortgage bonds is paid twice a year—January 2 and July 1.

SEC. 57. The payment of interest on mortgage bonds and the nominal price of bonds canceled is guaranteed not only by the yearly receipts (section 34) and the estates mortgaged, but by the foundation capital and reserve fund and all the property belonging to the bank.

SEC. 58. The payment of interest on mortgage bonds is made to the bearer of coupons of the same.

SEC. 59. Canceled mortgage bonds and coupons which are not presented for payment during the period of ten years from the date they were canceled lose their value, and the amount which should have been paid on such bonds become the profit of the bank.

SEC. 60. The mortgage bonds are printed according to a design confirmed by the Ministry of Finance, indicating the rate of interest, nominal capital and date of payment of same, together with that of the coupons attached to it. Mortgage bonds are cut out of a book so that part of them remain attached, and are issued with the signature of the president and two members of the administration. Each mortgage bond must contain, besides these signatures, that of the official authorized for this purpose by the Ministry of Finance.

SEC. 61. The amortization or canceling of mortgage bonds takes place—

(1) By payment from the cash of the bank, the nominal price of the bond, which is canceled; this takes place twice a year, at dates determined by the administration of the bank each year for an amount equal each year to the receipts to be realized from estates for the amortization of their debts, and likewise from all cash on hand received during the year for mortgages reimbursed before the expiration of the mortgage term (sections 25, 27, and 36).

(2) Also the canceling of mortgage bonds paid in to the cashier of the bank as per sections 18, 36, 42, and 45.

SEC. 62. The drawing of numbers of mortgage bonds canceled and the destruction of same takes place at the direction of the bank in public, in the presence of three deputies nominated at the general assembly and of the person appointed by the Ministry of Finance.

SEC. 63. During one month from the day the numbers are drawn, the numbers of the mortgages thus drawn are exposed at the direction of the bank and are published in the Official Messenger and local provincial newspapers.

SEC. 64. Mortgage bonds are accepted as security by the Government for enterprises and deliveries at prices fixed by the Ministry of Finance. They are also accepted as security by the Imperial Bank.

SEC. 65. The counterfeiting of mortgage bonds is punished the same as the counterfeiting of money.

CHAPTER VI.

Direction of the bank.

SEC. 66. The business of the bank is conducted by the direction situated in St. Petersburg (hence the name St. Petersburg-Toula Bank), and is composed of five members chosen and elected for the first time from among the founders of the bank, and later on elected at the general assembly of shareholders for a period of three years. The estimating committee is also situated at the direction of the bank.

(Remark.) In the event of any one of the members of the direction resigning his post before the expiration of the three-year period, a new member is elected at the general assembly.

The number of members of direction, if found necessary, may be increased by a resolution of the general assembly of shareholders.

SEC. 67. The members of the board of direction are chosen by the president from among the shareholders. Should the president fall ill or absent himself, his place is occupied by the member of the board of direction who has been the longest in office.

SEC. 68. Three years after the opening of the bank, two of the directors resign by drawing lots. After the fourth year two other directors resign in the same manner, and at the end of the fifth year, the fifth director resigns. After that, the members of the board of direction occupy the position for three years. A resigning director may be reelected.

(Remark.) Should the number of directors be increased, the general assembly fixes the number of years they are to remain in office.

SEC. 69. The members of the estimating committee are elected by the general assembly and the committee is composed of five members, under the presidency of one of them, elected among themselves. Members of the estimating committee are elected for three years and resign one after the other, in the order indicated for members of the board of direction; resigning officials may be reelected.

(Remark.) The number of members of the estimating committee may be increased by a resolution passed at the general assembly of shareholders, if such is found to be necessary.

SEC. 70. At the same time that the members of the board of direction and of the estimating committee are elected by the shareholders at the general assembly, three candidates are also chosen to take the place of any member who is absent for too long a time, or who may resign before the expiration of the term for which he was elected. The candidates are invited by the president of the administration, according to the greatest number of votes, and such candidates may occupy the vacant post for the time the post was to be occupied by his predecessor. While occupying the post of member of the board of direction or of the estimating committee, the candidate enjoys all the rights and fulfills all the obligations undertaken by the member of the board of directors or of the estimating committee for the time only that he occupies this position.

SEC. 71. Each member of the board of directors, as of the estimating committee, must possess at least twenty-five shares, which must be deposited at the bank until the accounts for the year during which he was in office is ended. Candidates for membership of the board of direction or of the estimating committee must also possess at least twenty-five shares.

SEC. 72. The direction manages the affairs and the capital of the bank, working upon the present statutes. It confirms the estimation of the estate to be mortgaged, decides the delivery of loans; puts arrests on estates which are under mortgage; orders the bond issues and cancels and annuls them; superintends the prompt payment by the borrowers of interest and other sums they have to pay on the mortgage; names the amounts which may be settled on short-term mortgages; takes measures to recover arrears and to sell estates for nonpayment of obligations; appoints administrators to manage estates which have become the property of the bank; superintends the correct keeping of the bank books and accounts; appoints and dismisses bookkeepers, cashiers, and other persons employed at the bank; determines their salaries; carries out resolutions passed at the general assembly; and, in general, occupies itself for the benefit of the bank and of its undertakings.

SEC. 73. On the estimating committee, lies the duty of verifying the estimates of the estates to be mortgaged at the bank based upon special instructions ratified by the general assembly. The committee presents a report of its work during the year for inspection at the general assembly.

SEC. 74. Propositions made by the direction and the estimating committee are decided by the majority of voices. When a majority of voices is not obtained, the president decides the question. In order that a question may be decided, it is necessary that at least three members, including in this number the chief director, be present at the meeting.

A resolution passed by the board of direction and of the estimating committee is inserted in the bank journal and must be subscribed by all present at the meeting.

All copies taken from the journal, as well as documents to be presented to Government institutions and courts, must bear the signature of the president and one member of the board of directors.

SEC. 75. The interior management of the bank and distribution of situations to persons, as well as their dismissal, and in like manner the rights and limits of action of employers and procuration, are defined specially by instructions emanating from the administration.

SEC. 76. Members of the board of direction and of the estimating committee receive compensation (or "jetous") for each meeting at which they were present. The general expense for this purpose is fixed by the general assembly of the shareholders.

SEC. 77. The president and board of directors are responsible only for the infringement of the statutes and resolutions of the general assembly, but are most responsible with respect to the obligations undertaken in the bank's name toward third persons.

CHAPTER VII.

General assembly of shareholders.

SEC. 78. General assemblies of this bank take place in St. Petersburg and are ordinary and extraordinary; the first take place every year, not later than the month of June, and the latter are summoned, in case of necessity, at the option of the board of direction or on demand of the shareholders when this demand covers one hundred voices.

SEC. 79. All persons holding shares of the bank have the right to be present at the general meetings, but only those who have at least ten shares have the right to vote. Shareholders possessing thirty shares, cover two voices; sixty shares, three voices; one hundred shares, four voices; and, lastly, one hundred and sixty shares and more, five voices.

SEC. 80. In order to be present at the general assembly, the shareholders, not later than fifteen days before the assembly takes place, are obliged to present to the administration either the shares belonging to them or a separate certificate from the Government bank, or branch office, showing that the shares have been deposited with them for safe-keeping, giving the numbers of the shares, and also [a pledge] that the shares will not be returned to their owners until the day following the general assembly.

SEC. 81. Shareholders who can not be present at the meeting may transfer their voices to another shareholder, who also possesses a voice; but one person must not have more than

ten voices in any case, including the shares he possesses and those he represents. The transfer of voices to a substitute is given in a written form, and this must be made known to the administration at least three days before the assembly.

SEC. 82. Before each general assembly, a list is made out of all the shareholders who have a right to a voice at the general assembly. This list is printed and is distributed at the entrance to the assembly; two of the largest shareholders present at the general assembly are invited to verify the list, as well as the number of voices present, including voices "per proxy."

SEC. 83. The direction publishes the date the general assembly is to take place in the Official Messenger and local provincial papers at least six weeks before the day appointed for the assembly indicating the questions which are to be discussed by the shareholders.

SEC. 84. The assembly is considered as having taken place if there are present not less than forty shareholders, having a right to a voice, excepting the case voted in section 86. If, on the day indicated, fewer shareholders are present, a second assembly is appointed which can take place not earlier than fifteen days after the first assembly. This assembly is considered valid, whatever number of shareholders is present, and whatever number of voices they represent; but only those questions which were to be considered at the first assembly may be discussed.

SEC. 85. The president of the general assembly is chosen by the shareholders present. Until he is chosen, the assembly is presided over by the president of the administration.

SEC. 86. Questions are decided at the general assemblies by a majority of voices, with the exception of cases given in clauses *d*, *e*, and *h* of section 88, to decide which questions it is necessary that two-thirds of the voices present [be given] (section 79). Besides this, in order to decide the questions stipulated in clause *h* (section 88) it is necessary that at the very least one-third of all the shares of the bank be represented at the general assembly. Resolutions passed at such general assemblies are binding for all the shareholders.

SEC. 87. Questions are brought before the general assembly not otherwise than through the direction, with its conclusion attached thereto. Therefore, should any shareholder find it necessary to make any kind of proposal he must apply to the direction, which proposal, if found worthy of notice by the direction, is presented by it to the general assembly with its views on the subject; at the same time, a proposal or claim against the direction signed by shareholders possessing fifty voices must be brought to the notice of the general assembly, with the decision of the direction, if such proposal or complaint is made at least seven days before the assembly is to take place.

SEC. 88. Questions which must absolutely be decided by the general assembly are the following:

(*a*) The election of members of the board of direction and of the estimating committee (sections 66 and 69); of deputies to assist at the drawing and annulling of such mortgage bonds as are to be canceled each year (section 62); of members of a committee for the revision of the yearly accounts (remark to section 92); and of candidates for members of the board of direction and of the estimating and revision committees.

(*b*) Confirmation of instructions for making the estimation of estates to be mortgaged (section 49) and the management of estates, which for unpaid arrears due to the bank have become the property of the bank (section 27).

(*c*) Final confirmation of the annual accounts presented by the board of directors and estimating committee.

(*d*) Resolution to increase the capital of the bank.

(*e*) Resolution as to changing or supplementing the statutes, making preliminary steps for this purpose with the Government.

(*f*) Discussing matters presented by the board of directors to the assembly.

(*g*) Resolution as to deciding the dividends (section 95) and gratifications to the members of the board of directors and of the estimating committee.

(*h*) Resolution to liquidate the bank.

All elections which take place at the general assembly are made in the order confirmed by the general assembly. The dismissal of members of the board of directors or of the estimating committee before the expiration of the period for which they were elected must be settled by votes.

SEC. 89. The sitting of one general assembly may, in case of necessity, last several days, but not longer than one week, with the appointment of the time of meeting by the assembly itself.

CHAPTER VIII.

Rendering of accounts.

SEC. 90. The annual operations of the bank are from the 1st of January to the 31st of December.

(Remark.) Should the bank be opened after the 1st of July, the operations of that part of the year will be carried to the next year.

SEC. 91. The yearly accounts must absolutely contain the following information:

(1) The number of mortgages and amount of capital remaining due by the borrowers from the foregoing yearly accounts.

(2) The number of mortgages and amount of capital given on mortgages during the present year.

(3) Sums of money reimbursed by the borrowers to the bank during the current period—*(a)* due to annual amortization installments; *(b)* due to the increase of part of the capital, besides the obligatory amortization; *(c)* due to the sale of the estates for arrears; *(d)* due to the recovery from insurance policies on buildings mortgaged in case of fire.

(4) The number of borrowers and the amount of debt due to the bank to be amortized in the next period.

(5) The amount of interest received by the bank in the current period from the bank's debtors.

(6) Amount received for fines and penalties for the nonaccurate payment of interest and amortization (each clause separately) remaining from the foregoing period, cleared, newly accumulated, and standing for the next period.

(7) The quantity and employment of the foundation and reserve capital.

(8) The number and capital in mortgage bonds remaining in circulation at the beginning of the new yearly period.

(9) The number and capital of mortgage bonds newly issued.

(10) The number and capital of mortgage bonds to be annulled in the current year—*(a)* in consequence of drawing; *(b)* due to the reimbursement made by borrowers; *(c)* due to the payment in mortgage bonds for arrears of and the sale of estates at auctions.

(11) The number and capital of mortgage bonds remaining in circulation for the next period.

(12) The number of interest coupons presented and of amounts paid thereon, for the yearly accounts, as well as for the preceding period; the number of coupons, the time period of which (on same) has expired, but which have not yet been presented.

(13) The expenses of management and all other expenses of the bank.

(14) The amount of cash capital kept in the bank.

(15) The number and quantity of capital not reimbursed on short-term mortgages newly given, indicating the mortgages returned and remaining due from the last year.

(Remark 1.) Each of the above-mentioned clauses must be shown in the accounts separately and must not be mixed one with the other.

(Remark 2.) Members of the board of direction who have signed the accounts are responsible for incorrect indications of figures in the rendering of accounts and in the balance sheet.

SEC. 92. The yearly account of the board of directors and the remarks made on it by the revision committee must be printed at least one week before the day fixed for the discussion

of these accounts by the general assembly and distributed at the direction to shareholders who may desire to become acquainted with the statement of accounts before the assembly, and then, together with the *procès verbal* drawn up at the general assembly, the accounts are presented in three copies to the Minister of Finance for his information.

SEC. 93. The annual accounts are published in the Official Messenger and local official papers.

SEC. 94. Besides the annual accounts, the direction publishes:

(1) The financial balance of the bank each six months, and not later than six weeks after the current half year.

(2) The resolutions passed at the general assemblies and the results of revision, as well as all information as to the direction.

CHAPTER IX.

Partition of the profits.

SEC. 95. From the net yearly profits, after deducting all expenses and losses, are put aside 10 per cent to the reserve fund and 5,000 rubles in the Mutual Help Savings Bank for employers at the bank. The remainder, if it does not exceed 8 per cent, is settled on the foundation capital and is considered dividends on shares. If the remainder exceeds 8 per cent, the surplus is divided as follows: Sixty-five per cent as a surplus toward dividends on shares, 5 per cent to the profit of the men employed at the bank, 5 per cent to the profit of the members of the estimating committee, 10 per cent to the profit of the members of the board of direction, and 15 per cent to the foundation of the bank or heirs or to such persons possessing their rights. The 15 per cent profit for the founders of the bank may not be paid for more than thirty years, after which time it enters the general dividends.

(Remark.) Should there take place a sale of some of the Government interest bonds, in which, according to remarks to section 52, a portion of the bank's foundation capital must be kept and this sale take place at prices above the prices at which these bonds were purchased, the difference or profit from such sale must not be entered among the profits to be divided according to the present statutes, but must go to strengthen the reserve fund besides that portion of the profits of the bank, which, based on these statutes, must be added to this capital.

SEC. 96. The paying of dividends takes place after preliminary publications and on the presentation of coupons.

CHAPTER X.

Reserve fund.

SEC. 97. The reserve fund of the bank formed by a portion of the net profits each year, stipulated in section 95, is intended to cover, in view of advances, mortgage bonds and their coupons, in case the borrowers have not paid in accurately their yearly payments.

SEC. 98. The reserve fund must be kept at the imperial bank or in Government bonds bearing interest, or in bonds guarantied by the Government.

SEC. 99. The portion of the net yearly profits paid into the reserve fund, as shown in section 95 of the statutes, ceases when the fund equals one-third of the whole foundation capital, not including that portion of the reserve fund formed by profit on sale of Government bonds, in which part of the foundation capital must be placed, based on remark to section 52. If expenses are paid out of the reserve fund, in consequence of which, with the exclusion of the portion of the reserve fund obtained from the sale of Government bonds (as stated above), should become less than one-third of the foundation capital, then from that time the portion (indicated in the statutes) of the net profits will again go toward the fund. The profits obtained through the sale of Government bonds are always placed in the reserve fund, although these profits may exceed one-third of the foundation capital.

If, in any year, in order to cover losses of the bank, it is necessary to employ the whole of the reserve fund, besides a portion of the foundation capital, then, in the years following,

until the bank's foundation capital has been reformed, sums which, according to section 97, would have gone toward the reserve fund, are paid into the bank's foundation capital.

CHAPTER XI.

Closing the operations of the bank.

SEC. 100. The operations of the bank may terminate at any time by a resolution of the general assembly, based upon clause 4 of section 88 of the present statutes. Should the losses be such that the foundation capital could not cover one-twentieth of the mortgage bonds in circulation, the bank is obliged to liquidate.

SEC. 101. In the event of the liquidation of the bank, the general assembly, at the request of the direction, appoints one or several administrators and determines the order in which the liquidation is to take place (section 2188, chapter 1, vol. x of the laws). At the same time they must observe the regulations by which, in liquidating the bank, in no case may the obligations undertaken by it toward third persons, such as the paying of interest on mortgage bonds and of the bonds themselves, be refused.

SEC. 102. The rights and obligations of the board of directors cease when administrators are appointed. The rights of the general assembly remain in their former condition during the liquidation. The assembly confirms the accounts of liquidation.

CHAPTER XII.

General resolution.

SEC. 103. In case of differences which may arise in the execution of the statutes, the same are decided by the Minister of Finance.

SEC. 104. In those cases when the statutes are not granted, the bank is obliged to observe the general laws concerning shareholding companies now in force and such as may in future be set forth.

RURAL LOAN ASSOCIATIONS IN GERMANY.

As building associations have obtained such a firm hold in the cities of the United States, it may not be uninteresting to those who give attention to the origin, development, and effects of mutual-benefit associations if I furnish the following account of the agrarian and kindred associations for mutual benefit which exist in Germany.

Mr. W. M. Kuhlowl has treated the entire subject as follows: Frederick William Raiffeisen, commonly known by the name of "Father" Raiffeisen, was, toward the end of 1849 and the beginning of 1850, mayor of Flammersfeld (a Rhine province district). Later on, he was mayor of Heddersdorf (Neuwied). At Flammersfeld, he had some thirteen country parishes and a population of 5,000 souls to attend to. Among these many of the well-to-do landed proprietors were entirely in the hands of the local money lenders who ruled the community. With much difficulty, Raiffeisen succeeded in getting all, or nearly all, the members of the parish of Flammersfeld to join together and form, as it were, in common, an unlimited-liability society, and thus the first rural company for lending money out on interest (*Darlehnskassen-Verein*) was founded. The system worked so well that, at the end of ten years, all the small peasants who had hitherto been a booty for the money lenders, became free men. Then it was that a commission was sent

from Berlin to study the system of forming cooperative associations for lending money.

The strength of the Raiffeisen associations consists in unlimited liability. No member can escape, for the association is not responsible for any of its members, but merely for the sums of money deposited. Their safety is so trusted that bankers have declared themselves ready to grant the associations credit, merely on the ground of their unlimited responsibility and without asking for any other guaranty.

Let us take an association consisting of some fifty-eight members. The community being in prosperous circumstances, each member can safely be calculated to be worth 10,000 marks (\$2,400). Thus the society can be said to dispose of a capital of 580,000 marks (\$140,000). As the different directors of the associations, by their regulations, are not allowed to speculate in any way, and, moreover, are only empowered to lend money to the different members, a complete security is offered.

Servants residing in places where there are no Raiffeisen *Vereine* frequently place their savings, etc., in the nearest associations; and, with a view to enable children to do the same (children as a rule, possessing a little pocket money) *Pfennigsparkassen* have been instituted, where 10 pfennigs ($2\frac{1}{2}$ cents) are accepted on deposit from children.

Those persons who desire to obtain a loan are obliged to satisfy the association on the following four points: (1) He, or they, as the case may be, must notify at an early date his application either to the director or to the accountant of the association; (2) he must explain for what purpose he requires the money; (3) how much he can pay back yearly; (4) somebody, with whom he is on friendly terms, must "go security" for him.

As regards the third point, it is a standing rule of the associations only to lend out money when there is a certainty that part will be paid back yearly. However, respites are granted, and the return of payments may be made during the year in the smallest sums. At present, all the different associations have accepted the statute, viz, that in each case where the accountant or one of the directors divulge anything with reference to a credit, which has been promised and vouched for, a fine of 30 marks (\$7.50) is imposed on them.

As those who have become sureties for their friends are entirely responsible, it is their interest to be vigilant and see that the loan obtained is used for the purpose given out. Should this not take place, the surety generally notifies the fact to the association; in this way, he shields himself. In cases where both the borrower and he who answers for him meet with heavy losses brought about by adverse circumstances, and through no fault of their own, the association is empowered to cover the deficit resulting from the reserve fund. This, however, is most rare.

The various Raiffeisen societies are in the habit of laying in a stock of the following articles of consumption: Seeds of different kinds, artificial manures, fodder, fuel, and flour.

As a rule, the associations commence to obtain considerable cash surpluses from the second, or, in the worst cases, the third year of their establishment. The cash surplus acquired in the first year is expended in connection with the charges of management, in the general arrangements, in the purchase of books, etc. All the members of the committee, according to the regulations, must take their share of the duties imposed in an honorary capacity. It is only the accountant who can accept fees.

Most of the associations existing at present pay $3\frac{1}{2}$ per cent interest for loans required by them, but exact 4 per cent interest from those borrowing from them. When the borrower obtains his money he pays one-half of one per cent, which goes into the money chest and is called "provision."

The total gains are divided each year into three parts. One part is laid aside for an indivisible *Stiftungsfond*, a second for the reserve fund, and a third part should, according to regulations, be divided as dividends among the members. It can be declared, though, in a general meeting, that for a period of ten years no dividends shall be divided among the members, and this measure can be renewed every ten years.

The reserve fund covers all losses, and, generally, consists of 15,000 marks (\$3,500). The indivisible *Stiftungsfond* is kept up according to the yearly money requirements.

From the above, it will be seen that the associations gain on every 100 a half per cent.

Almost at the same period that the Raiffeisen *Vereine* were instituted, another system called *Schulze-Delitzsch* came into life, without either one or the other knowing anything of their mutual existence. The *Schulze-Delitzsch* associations are of great use to those carrying on trade in towns and market places, for they afford the means of acquiring raw materials and money. These credit associations, though, only grant a short respite to the borrowers, but that is considered reasonable, as the trader barter his money much more frequently than the peasant; the latter can only shift his money once a year, after the harvest, and, therefore, requires a longer time for repaying his loan.

It may be said that these credit associations are somewhat speculative institutions, and do not offer the same security as the Raiffeisen *Vereine*, whereas the latter only extend themselves to small districts. The *Schulze-Delitzsch* can operate to an unlimited extent, and the yearly gains are not divided equally among the members, but in a ratio corresponding to the importance of the members' share of business. Occasionally this has resulted in overspeculation, and, lately, several associations established at Lohr, Dusseldorf, and Hassfurt have had to be wound from the above cause.

As the principal object of the Raiffeisen system is to combat the usurer and drive him out of the rural districts, it has always been in the interest of the different associations to help each other. This is frequently done by one society, which has a surplus of money, helping another one to cover its deficit. As a rule, every two years the affairs of an association are thor-

oroughly examined and looked into by a professional examiner of accounts, who is not a member of the association. When several associations join on to each other, the costs entailed by employing these professional examiners of accounts are shared.

The Bavarian *Landesverband* was formed on November 28, 1893, and it has its seat in Munich. It consists of a cooperation of agricultural associations for advancing money, together with a central pay office in Munich. The principal object of the *Landesverband* is to promote agricultural cooperative societies and the credit system. Many agricultural associations in the under and middle Franconian districts, as well as in Neuwied, are now joining the *Landesverband*.

The total number of associations which have joined this institution at the present time is 605. With the exception of a few small societies, this forms the total number of agricultural credit associations established in Bavaria.

The *Landesverband* hope to publish their first report toward the end of this year. The institution is greatly aided in its working expenses by receiving yearly the sum of 25,000 marks (\$6,000) from the Bavarian Ministry of the Interior. This sum, which was fixed by a decree of April 12, 1894, is given with a view to defray the costs of revision, etc., and encourage the institution in its undertaking.

It is calculated that the total value of business transacted by the *Landesverband* during the year 1894 amounted to 7,921,422 marks (\$1,900,000), and that during the same year, 143 revisions of different associations took place.

It is reckoned that in the whole of Germany there are some thirty-two associations *Revisionsverbände*, together with twenty-three centralized pay offices.

At first there was considerable opposition to the establishment of these central offices, for it was supposed that considerable costs would be incurred in erecting such establishments, and that corresponding benefits would not be forthcoming. However, their rapid extension and the continual flow of money into these establishments from various associations prove their success.

The Bavarian central *Darlehnskasse* (loan office) is managed by a board of directors, consisting of two paid directors and one unpaid honorary member. The two directors have to furnish a high security, amounting to between 20,000 and 25,000 marks (\$5,000 to \$6,000). The accounts are made up twice a year, viz, on June 30, and December 30.

The Neuwieder *Centralskasse* is one of the most important, possessing as it now does a reserve fund of upwards of 166,000 marks (\$40,000), and an authorized joint-stock capital of 1,380,000 marks (\$350,000). In spite of this, complaints were forthcoming at the general meeting held in Mainz, June 20, 1894, that the *Reichsbank* would only advance them money at the rate of 5½ per cent.

There are few difficulties in forming a Raiffeisen association. In a district where there are but three honest, competent, and willing men, the one

who will act as accountant, the second as director, the third as president of the superintending council, a society can be formed. The Bavarian *Landesverband* on such an occasion supplies the necessary forms of their organization free of cost.

It is generally found to be advisable that the clergyman or schoolmaster of the district should undertake the duties of accounting, but shopkeepers, in general, likewise make good accountants. The accounts have to be gone through four times a year, but they present no particular difficulties, and either a clergyman or schoolmaster is well qualified for the work. It is calculated, in the smaller associations, that the accountant can dispose of his work during ten months in the year by merely giving up a quarter of an hour per day to it. In the months of December and January, though, more time would have to be found by the accountant.

Thus, the way to form an association is to begin by finding three willing and competent men as described above. This having been done the elections take place—that is to say, five persons are chosen for the directory, and nine to act as superintendents of the council. Afterwards, a general meeting is held. The protocol supplied is discussed and settled, and the formation of the society is announced to the provincial court of justice. The association is then in working order, and, little by little, as the case may be, extends itself.

In 1893, there were 1,038 credit societies on the *Schulze* system; the amount of their credit was calculated at 1,579,000,000 marks (\$393,000,000). Among this number, it was reckoned that there were, perhaps, some 157,183 independent farmers who took part in the credit to the amount of 300,000,000 marks (\$75,000,000).

As regards the Raiffeisen associations, during the year 1893, it is roughly stated in a report from Neuwied that there were 713 *Vereine*, with 62,000 members. Their credit business was calculated to amount to 25,000,000 marks (\$6,000,000).

As the word *Umsatz* so frequently occurs in all the financial transactions of the different kinds of associations, it will, perhaps, not be out of place to briefly describe its real meaning. It does not mean capital, in the strict sense of the word, but rather the combined sum of all the transactions made in some business, or, again, the combined amount of the sums which pass through a business, whether in credit or debit—in fact, whether the sums be received or paid out. It might be called “turnover.” As it is to be presumed that transactions are made with a view to derive profit therefrom, therefore the greater the *Umsatz* the greater ought to be the profit.

The *Genossenschafts Kassen* can be regarded as bankers, but the profits derived by them on single transactions being much smaller than those derived by merchants, etc., they are compelled to make greater transactions, or have a much larger *Umsatz* than the latter.

The question of establishing *Darlehenskassen-Vereine* in Wurtemberg arose in the year 1879. The Raiffeisen system existed at that period in the

Rhine provinces, as well as in Hessen and Baden, and was proving successful. At first, though, the press and assemblies which were held to discuss the matter, were hostile. At a meeting in 1880, at Ulm, of Wurtemberg agriculturists, the system was voted against, but on Raiffeisen himself propounding this theory in the Liederhalle at Stuttgart, on October 28, 1880, the ice was broken. Eleven associations were at that period formed, and a few years afterwards the system was in full working order, and, since 1882, a rapid extension of these associations has been the result.

It was about this time (1882) that an arrangement with the Royal Bank of Wurtemberg was entered into, from which the different associations derived much benefit. In that year, the Royal Bank opened a credit to the amount of 245,000 marks (\$60,000) to 32 associations. In the year 1893, the credit given to some 559 associations by the bank had advanced to 3,222,300 marks (\$800,000).

There exist in Wurtemberg a great many banking institutions which are established on the Raiffeisen system, and there is no doubt the agricultural population has benefited to a considerable extent from them. Before their institution, the rural classes, as in Bavaria, suffered severely from the extortions of usurers. These money-lenders (and there were numbers of them) were invariably ready to assist people with loans, but always at a high rate of interest, for the lender had to calculate a premium for a possible loss, in the event of his debtor not being able to repay him. Moreover, as the agricultural profits were small, debtors often found it impossible to obtain the means of continuing to pay their debts and the high rates of interest, and thus many people were ruined. All this, one way or the other, led to the establishment of the *Genossenschafts-Vereine* (mutual benefit unions), for it was found that in one and the same parish there were generally some persons who had money to spare and others who required it. Among the latter class, many were known to be respectable, honest, and orderly people, who, provided the terms imposed upon them were not too heavy, would certainly pay their debts.

It should be remembered that, in Wurtemberg, there are many small landed proprietors, who, in ordinary times, find their means of subsistence without any help, as they are both industrious and thrifty, and make as much out of their little estates as is possible. They can, moreover, compete with the larger landed proprietors; for while they themselves are generally assisted by their own relatives, the owners of larger concerns have to employ and pay for the labor of work people. Still, in times of sickness and misfortune, these small proprietors get into trouble, and, as they seldom possess ready money, they have to endeavor to borrow it.

It was often found that at a particular moment one man could spare money, whereas another, at that time, was in want of it; but very likely the latter, a short time afterwards, would find himself in a situation to be able not only to pay back his debt but have money over, whereas the former would perhaps then be in want of a loan for a certain period. From this, it

will be seen that members of the same *Genossenschaft* might, at one time, be creditors, and, at another, debtors. As all the members are responsible for the association, it follows that they watch each other pretty keenly and are interested in preventing the reception of those who are not trustworthy; and it is to be presumed that in one and the same parish the inhabitants will know each other pretty well. Moreover, it has now become a principle that only persons of the same *Gemeinde* (parish) will be admitted as members in a *Genossenschaft*.

As the *Genossenschafts-Kassen* require no profits and pay no dividends, and, as in Bavaria, the only salaried member is the cashier, the different members of the board acting in a purely honorary capacity, it results that they are in a position to offer a fair interest to their creditors, and exact a modest rate of interest from debtors.

H. F. MERRITT,
Consul.

BARMEN, *September 28, 1895.*

AGRARIAN MOVEMENT IN GERMANY.

The most serious internal difficulty with which the German Empire has to deal is one that threatens to affect that Empire profoundly in its relation to the United States as a producer of grain and cattle, cotton, wool, and other agricultural produce, as well as of such manufactures as compete with objects made in Germany. Having by conquest acquired territory to the south, east, and northwest, the German Empire has to support an enormous military establishment. Officers and soldiers are largely drawn from the landed proprietors, farmers, and peasantry; and although of late years the cities have increased in population much faster than the country, yet it is maintained by persons who profess to know what constitutes the best human material for killing and being killed, according to the latest rules of war, that for such purposes city populations are very inferior to those of the country.

For keeping the army in its highest fighting strength, the country people must be maintained. But the low price of grain is driving landed proprietors to the wall. They can not pay their hands. The efforts made in some places to restore the equilibrium of population by replacing on the land a small independent farming community, are only partially successful and give no certainty of permanent results. Emigration still continues; temporary laborers more and more take the place of the permanent laborers formerly more or less attached to the soil. The nobles and landed proprietors in some parts of Germany are often themselves to blame in part, for they have been rooting out the small proprietors, seizing communal lands and turning large sections into private ownership for plantation or hunting purposes.

In Prussia, there was a period between 1860 and 1875 when everything was favorable to agriculture; the rooting out of the small owners and peasant

propriatorship went merrily on. Noble and other families with land began to live on a scale their fathers and grandfathers never dreamed of. The sons were placed in crack regiments, some of which to-day boast of having for officers no one with a lower title than count, and proprietors were burdened with debts or liens for the education and support of various members of the family, not to speak of debts for the maintenance of those in the army whose pay was inadequate to support their official and social rank.

Since 1875, the tide has changed, largely, of course, through the opening up of vast tracts of virgin soil to agriculture in North and South America; but the downward course of grain prices has been aided by speculations in poor Russian grain, as well as by manipulations of the market, which frightened producers into selling at a loss.

The nobles, the farmers, and small proprietors in Prussia have been gathering strength in the Landtag, or Prussian legislature, and whereas in the imperial Reichstag, or Parliament for the whole of Germany, the extreme protectionist bill fathered by Count Kanitz did not pass, yet in Prussia, at least, the agriculturals, or agrarians, are not disheartened, and propose, during the coming winter, to renew the attack by reintroducing the bill of Count Kanitz in the Reichstag and making things very lively for the Prussian monarchy in the Landtag in pursuit of their claims.

In Prussia, this party put through, two years ago, a very important measure, which is the first step to organizing the forces of agriculture against those of commerce and manufacturing industry. It was a bill ordering the formation all over Prussia of chambers of agriculture, to which all landed proprietors paying \$25 in taxes must belong. These chambers are given the right to exact taxes from their members, although landed proprietors are already taxed very heavily in a triple direct way, viz, ordinary taxes, tax for insurance of laborers against accidents, and tax for pension of aged laborers, and are, of course, otherwise taxed in an indirect way to support the vast military and naval organizations. It is supposed that landowners will pay this new tax, levied by the chambers of agriculture, with the greatest willingness, for the reasons now to be set forth.

The league of landowners is said to have already in bank about \$100,000 for carrying on the general campaign, but the chambers are to form financial centers all over the country which will be able to effect certain important things. They may establish banks, and by advancing money on crops, rescue the farmers from the middlemen who are said to prey on them. They can say to the Government: "We pay taxes and want protection. Give us storage warehouses (*Gertreide*, or *Korn Silos*) at convenient points where farmers can deposit their grain and get a receipt, whence railways can take the grain by cheap local freights for home consumption, where finally the army purveyors can always get good, clean grain at the ruling prices."

The Agrarians have been beaten once, but they are increasing in numbers and expect a large increase through the surrender of the Catholic Center party, when they expect to run things to suit themselves. They will ask for

such freights on outside grain as to favor the home article, for representatives in the grain exchanges, for inspectors on the Russian and Austrian frontiers to stop bad grain, and in other ways will insist upon privileges which shall paralyze the business of the middlemen on the farms and speculators in the cities.

Of course—and here the matter comes closer to the interests of our citizens—the Agrarians do not hope to compete with North and South America by these radical matters of organization alone. All these efforts might easily fail to raise the price of grain enough to compete with low sea freights and more favored soils. The Agrarians are staunch protectionists, and while they besiege the Emperor through his *entourage* with complaints of financial ruin, they are preparing to attack industrial and commercial Germany in the legislatures of Prussia and the Empire. They will call for the abrogation of treaties with “favored nations,” and especially that made some years ago under Chancellor Caprivi with Russia, and ask that if it be a sacrifice of industries, then that industries be sacrificed, in order that young men shall not emigrate to the cities, and become poor material for soldiers, or to foreign lands, and be lost forever to the military.

A leading member of this party was asked to-day: “But suppose the King of Prussia refuses his consent to this scheme?” “Then,” he said “the Prussian house of representatives will refuse to vote the King of Prussia his supplies.” Without having much weight in itself, this warlike statement shows the bitterness of the landowning class in Prussia. It has always been a highly privileged class and generally a petted class. Since 1879, it has had a duty on foreign grain, from which, in 1894, the Empire received nearly 100,000,000 marks, and it obtained the exclusion of American cattle. Letters now being published which were written by prominent members of the party as far back as 1888 show that the bitterness to-day is not merely of yesterday. They corroborate the private statements of Conservatives and Agrarians as to the exasperation of the landowning classes at their loss of money through falling prices. Neither the present duties on grain, nor the premium on sugar, nor the exclusion of American fresh meat begin to satisfy the demands of this powerful party in Prussia.

As regards the reintroduction in the German Parliament of the protectionist bill of Count Kanitz alluded to above, it is safe to say that it will not pass. Should it get through the lower house, it is almost certain to be killed in the Bundesrath, or federal upper chamber. But it will be introduced without hope of its passing after a fashion which has gained ground of late in Germany. Its object is to form a rallying cry for Agrarians and frighten the Government into concessions. The cry with which other parties are to be overcome is the cry that, in case of war, Germany will not be able to feed her millions and supply her armies unless acreage sufficient to supply all with breadstuffs has been brought under cultivation by the raising of the price of grain. Opponents say that this can not be accomplished, and point to the fact that when duties were put on foreign grain these duties did not

cause an extension of the acreage of grain in Germany; on the contrary, more and more land went into beets for sugar and potatoes for alcohol.

The United States must look for a strong effort on the part of all conservative, provincial, and reactionary elements of North Germany to keep out American products.

BERLIN, *October 5, 1895.*

CHARLES DE KAY,
Consul-General.

ERHARDT PROCESS IN METAL WORKING.

Among the most important of recent German inventions in the field of mechanics is unquestionably the Erhardt process and apparatus for manufacturing tubular bodies, which has been patented in Europe and America, and has been, during the past two years, in highly successful operation at the works of the Rhenisch Metal Ware and Machine Company at Dusseldorf.

The principal underlying this process appears not to be entirely new, a somewhat analogous method having been already employed on a limited scale in England, but the machinery and working methods devised by the German inventor are so far in advance of all precedents that his patents, even in the United States, are claimed to be fundamental and comprehensive.

The process in question is for making tubes of all kinds, gun barrels, hollow projectiles, acid flasks, parts of machinery which combine the utmost degree of lightness with adequate strength—in fact, an indefinite variety of hollow metallic articles by thrusting a steel core or mandrel through a billet

of hot steel, wrought iron, or other metal, which is held firmly in a matrix of such shape and caliber as to give the required outward form to the completed object.

In the works at Dusseldorf, the mandrels are operated by hydraulic pressure, and are usually set in a horizontal position, though this is immaterial, the matrices being held in position in massive iron bed frames and carefully adjusted so that the mandrel, being steadied at the point of impact by firmly fixed guides, shall pierce the exact center of the billet, and, by compressing the yielding metal outwardly into the space between the mandrel and the matrix

produce a hollow body, the shell of which is everywhere of exact and uniform thickness. Both mandrel and matrix, or either of them, may be round, square, hexagonal, or of any other desired sectional shape, so that round, square, or otherwise formed tubes may be made with equal facility. Not only wrought iron and steel, but copper and other malleable metals are worked with entire success by this process, the only requirement being that the blank billet, in case of each different metal, shall be worked at such temperature as to secure its highest degree of malleability and ductility.

The advantages claimed and apparently already realized by this process are, first, an economy which, in case of several leading articles, is not less than 50 per cent over any other method that has been hitherto employed, and, secondly, a definite superiority of quality in the finished article. This superiority results naturally from the conditions under which the plastic metal is molded by mechanical pressure into the required form.

When, for instance, a gun is made by the old method of forging a solid blank, which is then hollowed out by boring, it may often happen that the firmest and most homogeneous part of the steel at the core of the billet is cut away by the drill, which reveals nothing of the flaws and imperfections that may exist in the interior surface of the barrel. Similar defects may occur in boiler or other tubes made by welding or other processes ordinarily employed; but by the Erhardt process, the solid cube of metal is pierced, forced through the matrix, elongated and driven by lateral displacement into its new form by a steady, resistless power, which compresses the metal to a high degree, welds and obliterates every flaw or seam, and leaves, as the hardest, densest portion of the tube or barrel the interior surface of its bore. This pressure is so great that when the mandrel is withdrawn the surface which it leaves has a glistening appearance, as though polished by friction or hammering.

Among the varied purposes to which the process has been applied at Dusseldorf, the two simplest and most susceptible of ready description are the manufacture of shrapnel shells for the German field artillery and steel flasks for containing liquid carbonic and other acids. The problem, in the first instance, is to make by the best and cheapest method a hollow, pointed steel projectile, about 3 inches in diameter by 12 inches in length, the shell of which is about one-fourth of an inch in thickness and of exactly uniform weight on all sides, so as to secure to the projectile a perfect axial rotation when in flight. For this purpose a 3-inch cube of mild steel, heated to cherry red, is dropped into a slot at the opening of the matrix. A touch upon the lever controlling the hydraulic press starts the mandrel, which, with one noiseless thrust, pierces the billet, drives it through the matrix, draws it out like wax, spreading the pliant metal over the end of the mandrel like the finger of a glove, shoves the end of it into a die which tapers it to a point, and, within two seconds of time, the process is complete.

Similarly, from larger steel billets, acid flasks 4 or 5 feet long by 8 inches in caliber are made and shaped by a single movement of the press, without

a seam or flaw, and of such quality that its thin shell sustains an expansive pressure of 250 atmospheres. So superior, indeed, is the work turned out by this method, that the German Government has required the principal maker of guns and projectiles in this country to adopt the Erhardt process for the manufacture of such war material as is delivered for the use of its army and navy. The same system works equally well in the manufacture of hollow projectiles of all larger sizes and in making steel cannon tubes of 3-inch, 6-inch, and greater calibers. In all these specialties, the quality of the product is pronounced by ordnance officers not only superior to that of shells and guns made by other methods, but the economy in cost is said to be fully 50 per cent. Copper tubes of all ordinary sizes and of any length up to 20 feet are likewise made by the Erhardt process, the limitations of which, in respect to diameter, length and shell thickness of the hollow body produced, are fixed only by the size of the machinery and the degree of dynamic force employed.

But the ultimate value of the invention will be measured by its application to mechanical construction in substituting hollow, and, therefore, lighter parts of machinery and structural forms for those which are now made of solid metal. The progress of modern mechanics is toward the utmost economy of power through the saving of friction, directness, and simplicity of coupling, and lightness of construction in all working parts. Axles, shafting, pinions, driving rods, and other parts of machinery that are now solid and inert, will, in future, be made hollow, and from metals and alloys of highest resistance. In all this wide and important field of improvement, the process herein described seems likely to play so important a part that its successful introduction, already an accomplished fact, is believed by competent engineers to mark an epoch in the progress of metal working.

FRANK H. MASON,
Consul-General.

FRANKFORT, *June 28, 1895.*

AUSTRIA-HUNGARY: TRADE, PRODUCTION, ETC.

The statistical department of the imperial royal Ministry of Commerce publishes the data of the export trade of the Austro-Hungarian customs districts in the month of July, 1895. According to these reports, the imports amounted to 63,500,000 florins* (\$25,781,000), exclusive of the precious-metal trade, an increase of 5,900,000 florins (\$2,395,400) in comparison with the July statement of 1894. The exports amounted to 63,500,000 florins (\$25,781,000), a decrease of 2,400,000 florins (\$974,400). The exports were, therefore, equal to the imports in this month, against a surplus

* The silver florin was the Austrian money unit up to July 1, 1892, about which date the gold crown became the unit. In a table (CONSULAR REPORTS No. 168, p. 141) showing the wages paid in Austrian hemp mills, the florin is valued (July 23, 1894) at 40.6 cents.

of 8,300,000 florins (\$3,369,800) exported over the imports in the year 1894. From the first of January to the end of July, 1895, the imports, excluding the trade in precious metals, amounted to 427,800,000 florins (\$173,686,800), an increase of 14,400,000 florins (\$5,846,400), and the exports, 411,400,000 florins (\$167,028,400), a decrease of 22,800,000 florins (\$9,256,800).

Concerning the quantity, the imports during the same time amounted to 45,700,000 metric quintals (4,570,000 metric tons), and the exports to 72,600,000 metric quintals (7,260,000 metric tons). There were, therefore, exported 26,900,000 metric quintals (2,690,000 tons) more than were imported.

During the same period, the trade in the most important articles was as follows during the seven months ending July, 31, 1895:

Articles.	Value.		Increase and decrease as compared with 1894.	
			Increase.	Decrease.
<i>Imports.</i>				
Colonial wares.....	25,000,000	\$10,150,000	\$446,600	.....
Corn.....	14,600,000	5,927,600	.....	\$1,904,200
Coal and coke.....	18,300,000	7,429,800	1,299,200	.....
Cotton.....	31,800,000	12,910,800	.....	527,800
Cotton yarn.....	10,200,000	4,141,200	203,000	.....
Flax, hemp, etc.....	12,700,000	5,156,200	568,400	.....
Wool, worsted yarn, etc.....	22,600,000	9,175,600	.....	81,200
Silk and silk goods.....	19,500,000	7,917,000	.....	649,600
Iron and ironware.....	10,800,000	4,384,800	812,000	.....
Machines and apparatus.....	13,500,000	5,481,000	121,800	.....
<i>Exports.</i>				
Sugar.....	32,500,000	13,195,000	.....	4,750,200
Corn.....	24,000,000	9,744,000	.....	121,800
Cattle.....	37,900,000	15,387,400	.....	4,100,600
Animal products.....	45,500,000	18,473,000	2,557,800	.....
Liquors.....	11,800,000	4,790,800	.....	121,800
Wood.....	37,800,000	15,346,800	.....	649,600
Coal and coke.....	16,400,000	6,658,400	.....	446,600
Cotton goods.....	3,000,000	1,218,000	.....	243,600
Linen yarn.....	4,000,000	1,624,000	.....	121,800
Woolen goods.....	8,600,000	3,491,600	.....	406,000
Paper and cellulose ware.....	9,800,000	3,978,800	.....	81,260
Leather goods.....	17,500,000	7,105,000	487,200	.....
Glass and glassware.....	18,200,000	4,953,200	568,400	.....
Iron and ironware.....	10,900,000	4,425,400	1,015,000	.....

E. P. T. HAMMOND,
Consul.

BUDAPEST, August 31, 1895.

RICE CULTURE IN AUSTRIA-HUNGARY.

Rice culture in Austria-Hungary is, relatively speaking, insignificant, and confined to certain districts of the Austrian maritime provinces. The experiment of planting rice in the south of Hungary some years ago has pro-

duced good results. Although the quantities are small, the quality of the rice is equal to the better qualities produced in Italy. The extent of the rice trade between Asia and Europe, principally via London and Liverpool and then via Bremen and Rotterdam, in metric tons, was as follows in 1894: From India, 915,027; Japan, 59,780; Java, 27,245; total, 1,002,052.

The price of rice has declined considerably in the last few years, in consequence of the disadvantageous conditions of production and the cheap freight rates by sea; it is, therefore, natural that the consumption of this article of food should have increased in Europe. Great Britain, Bremen, and Hamburg, as well as Holland, Belgium, and France have a large import and carrying trade, and the rice-paring (peeling) industry is also much developed.

The rice imports of Austria-Hungary are likewise important and always on the increase. In the last year, they amounted to 94,468 metric tons, of which there were 33.3 tons of pared rice, 57,778.7 tons of raw rice, for the inland rice mills, and 1,382 tons of rice parings for starch manufacture.

Austria-Hungary's largest quantity of rice import goes out by the ports of the Adriatic Sea, having favorable customs duties and a considerable carrying trade with the Levant. Last year's importation of rice to Fiume amounted to 52,368 metric tons; to Trieste, 31,270 metric tons; thence it was carried to the German boundaries by railway and the rivers Elbe and Danube.

As to the consumption, Indian rice was mostly in demand, owing to its low prices, especially in the countries with insufficient productions of cereals, or crowded populations, as the Austrian maritime regions, a part of the Alpine countries, Bohemia, Moravia, and the mountain districts of Upper Hungary and Galicia. Italian rice comes next in demand, bringing the highest price, and is used by the wealthier classes of the population. Japanese rice, which is nearly of the same quality as Italian, but cheaper, is more in demand from year to year.

Rice is used in the manufacture of starch, which is much better and finer in quality than any starch made out of other cereals. In Great Britain, Germany, Italy, Belgium, France, and in recent years in Austria-Hungary, large quantities of rice parings are employed in the manufacture of starch. The rice-paring industry of this monarchy has already increased considerably through the influence of the favorable conditions of the customs duties. The rice-paring factories in Fiume, Trieste, and Budapest are able to provide for the increasing needs of the monarchy, as well as for food and technical purposes, but only in those places where the north German supply can not be taken owing to the unfavorable conditions of freight.

In spite of the increased customs duty for import of 1.12½ florins (45.67 cents) per metric centner (220.46 pounds) the great north German industry is able to compete successfully, especially in the quality, with the industry of this monarchy.

The starch industry of Hungary has likewise become a considerable one, and Fiume shows the largest production; the other starch factories of

Austria-Hungary produce starch out of rice, as it is mostly demanded next to the starch from wheat and potatoes. The peeling productions of the rice and starch manufacture, as fodder for cattle, form also an important article. The flour is of great value in the dairy for cattle feeding, a fact that is known and appreciated by all the farmers. Rice as food for the poorer population has now become a necessity in Hungary, and its importation, use, and culture are increasing year by year.

EDWARD P. T. HAMMOND,
Consul.

BUDAPEST, *September 19, 1895.*

SEA TRAFFIC OF FIUME.

According to the statistical statements at hand the sea trade of the Hungarian port of Fiume, for the first six months of 1895, was as follows:

Description.	1895.		1894.	
	<i>Met. cent.</i>	<i>Tons.*</i>	<i>Met. cent.</i>	<i>Tons.*</i>
Imports.....	2,635,557	.....	2,329,939	.....
Exports.....	1,117,803	.....	1,145,165	.....
Total trade.....	3,753,360	.....	3,475,104	.....
<i>Principal articles imported.</i>				
Coffee.....	6,308	631	10,428	1,043
Cereals.....	64,726	6,473	59,248	5,925
Rice.....	454,564	45,456	381,653	38,165
Oils:				
Vegetable.....	14,200	1,420	16,160	1,616
Mineral.....	356,617	35,662	285,280	28,528
Wine.....	374,535	37,453	520,152	52,015
Tanning materials.....	12,100	1,210	6,420	642
Gums and resins.....	18,397	1,840	19,386	1,938
Jute.....	109,955	10,995	115,170	11,517
Chemical products.....	44,878	4,488	17,743	1,774
Corn.....	94,130	9,413	23,660	2,366
Iron.....	170,074	17,007	.....	.....
<i>Principal articles exported.</i>				
Sugars.....	66,610	6,610	128,726	12,873
Plums.....	12,376	1,238	14,150	1,415
Wheat.....	36,555	3,655	21,618	2,162
Barley.....	154,973	15,497	103,001	10,300
Beans.....	101,316	10,131	159,938	15,994
Rice.....	19,160	1,916	15,944	1,594
Corn.....	38,925	3,892	14,382	1,438
Flour.....	467,970	46,797	440,050	44,005
Wine.....	4,764	476	10,004	1,000
Spirits.....	1,013	101	4,507	451
Mineral waters.....	11,934	1,193	14,328	1,433
Tanning materials.....	55,070	5,507	64,540	6,454
Cellulose.....	6,462	646	13,032	1,309
Chemical products.....	17,955	1,795	12,975	1,298
Paper.....	4,244	424	5,785	578
Staves.....	†19,680,000	.....	†23,360,000	.....

*Tons of 2,204.6 pounds.

†Number.

The exports of wood and timber by Fiume show a continually considerable increase.

The sea traffic of Fiume is making advances and a brisk trade is anticipated in cereals, as well as in other products growing so abundantly in Hungary.

I understand that strenuous efforts are being made to improve the communication between land and sea, as the temporary accommodation of these goods which have to be stored in magazines meets with considerable difficulties, which can not be easily removed. Great pressure is being brought to bear both upon the steamship and railway lines to make provision for the increased demand upon them.

E. P. T. HAMMOND,
Consul.

BUDAPEST, *August 30, 1895.*

TRADE OF AUSTRIA-HUNGARY WITH EGYPT.

The trade of Austria-Hungary with Egypt is well known to be an extensive one, and the frequent trips of steamers between Trieste and Fiume contributes largely to that end. Egypt is a fertile field for the introduction of goods, and particularly of industrial articles, such as textiles, hardware, manufactured metals, woolens, linens, cloths, paper, matches, furniture, porcelain, earthenware, glassware, beer, sugar, alcohol, grinding products, legumes, timber, and many other articles. On the other hand, Egypt furnishes in return cargoes many of her own productions, especially cotton, fresh vegetables, gums and resins, tropical fruits, raw skins, wax, tobacco, etc., in considerable quantities.

This exchange trade of Austria-Hungary with Egypt shows an increase in the year 1894 over the year 1893. The exports from Austria-Hungary to Egypt amounted in 1894 to £743,164 Egyptian (\$3,673,460) against £720,362 (\$3,560,749) in the year 1893, notwithstanding the low prices paid on an average for most of the articles of import.

The principal part of the trade goes by the port of Trieste, which has a lively and extensive carrying trade with Egypt. Part of the exported goods go by Fiume, the Hungarian seaport.

In order to obtain a clearer view of this trade, the following figures for the last year concerning the principal articles are given :

There were exported from Trieste to Egypt, in metric centners : * Mineral water, 2,875 ; alcohol and brandy, 9,621 ; beer, 35,518 ; paper and pasteboard, 30,165 ; hardware, 1,958 ; woolen goods of every kind, 9,215 ; iron goods, 3,165 ; furniture, 8,306 ; metal ware, 1,350 ; porcelain, 1,560 ; glassware, 6,970 ; matches, 5,502 ; sugar, 23,470 ; flour, 4,061 ; beans, 2,462 ; potatoes, 10,190. As to timber, I have not the exact data, as the reports are only indicated in logs.

* 1 metric centner = 220.46 pounds, or one-tenth of the metric ton of 2,204.6 pounds.

The imports into Trieste from Egypt, in metric centners, were : Cotton, 171,115; tropical fruits, 8,200; onions and fresh vegetables, 126,125; coffee, 41,032; tea, 2,070; indigo, 3,404; mother-of-pearl shells, 1,738; gums and resins, 7,432; senna leaves (used largely in medicines), 1,220; tobacco in leaves, 12,074; wax, 650; skins and furs, 5,914.

The Hungarians have in contemplation a direct steamship line from Fiume to Egypt, which would largely increase their trade.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *August 29, 1895.*

EXPORTS OF HORSES FROM AUSTRIA-HUNGARY.

The exportation of horses from Austria-Hungary is much livelier this year than last. The figures from the first of January to the end of August in the years 1894 and 1895 are :

Description.	Number.		Value.	
	1894.	1895.	1894.	1895.
Stallions :				
For breeding purposes.....	48	75	\$42,923	\$66,990
Other.....	710	533	187,369	140,659
Mares :				
For breeding purposes.....	197	152	119,973	92,568
Other.....	7,326	12,536	1,487,178	2,196,582
Geldings.....	14,359	19,996	2,623,893	3,384,680
Colts	977	563	47,599	27,429
Total.....	23,617	33,855	4,508,935	5,908,908

It may be mentioned that, in consequence of this increase in the exportation of horseflesh, there is a decrease in the exportation of cattle, both for slaughter and draft. Hungary is more largely engaged in the exportation of horses than any portion of the monarchy. Italy buys the largest number, followed by Germany, Roumania, etc. Geldings and mares are mostly in demand.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *October 1, 1895.*

SUGAR EXPORT OF AUSTRIA-HUNGARY.

The exports of sugar from Austria-Hungary amounted in the six months ended June 30, 1895, to 351,830 metric tons. Of this amount Austria exported 328,006 metric tons, while Hungary exported only 23,824 tons, but whose growing industry will be enabled in the future to partake more largely in the export trade.

The greater part of the trade when shipped by sea goes by the Adriatic ports of Trieste and Fiume, and again by the ports of the North Sea, and especially by Hamburg.

Of the total exports, the following amounts were sent as indicated:

Exported to—	Quantity.	Exported to—	Quantity.
	<i>Metric tons.</i>		<i>Metric tons</i>
Germany.....	6,020	Servia.....	5,687
Switzerland.....	36,057	Turkey.....	12,930
England.....	197,855	Italy.....	38,836
France.....	50	Levant.....	14,850
Sweden and Norway.....	122	Asia Minor.....	279
Russia.....	79	India.....	4,049
Roumania.....	14,827	Africa.....	384
Bulgaria.....	3,977	North America.....	135

In the month of August, there were exported about 19,972 metric tons.

E. P. T. HAMMOND,

BUDAPEST, *September 26, 1895.*

*Consul.**

GRAIN CROP OF HUNGARY.

The harvest in Hungary is nearly over, and has produced, on an average, a good middling crop, although the quality is deficient. It is believed that the quantity will be sufficient for the export trade. There is a very good crop in the "Alföld," or great Hungarian plain, with its "Pusztas," or immense farming estates situated in the very heart of the plains. The "Pusztas" are the former sites of towns and villages which were destroyed by Turkish hordes, hence their name, which signifies wilderness or waste. Out of these deserted towns and villages, the "Pusztas" were gradually formed, and were either sold by the Turks to the first bidder for an insignificant sum, such as \$500 for 20,000 or 30,000 acres, or, as in most cases, were purchased by the adjoining communities, which accounts for the fact that many communities possess between 30,000 and 50,000 acres of land, which, yielding a very large revenue, enables them to meet not only all municipal requirements without taxing the population individually, but also gives them the means of establishing many agricultural and industrial schools. There are two kinds of "Pusztas"—one consisting only of pastoral land, reedy marshes, or sandy plains, and the other presenting cultivated soil producing vast crops of wheat, maize, hemp, flax, and tobacco, with a large variety of fruit trees and vineyards.

* RUSSIAN SUGAR PRODUCTION.—Under date of October 10, Consul Hammond reports that the St. Petersburg Department of Commerce has communicated the following: "Considering the overproduction of sugar, and the consequent falling off of prices, the Minister of Finance and the Minister of Agriculture have been ordered to make arrangements to prevent the erection of new sugar factories and put a stop to the enlargement of the capacity of existing factories. In consequence of this, the Minister of Finance has taken the necessary preliminary measures. A special commission will be chosen to take this matter into consideration. Until then, it is considered expedient not to grant permission for the foundation of any new company for the production of sugar, nor to increase invested funds, except in extraordinary cases, worthy of special notice."

The sudden development of these "Pusztas" is remarkable. Thus we often find certain of them consisting of 30,000 acres, which, as recently as 1840, were only waste and unproductive land let out for about \$250 a year, now converted into fertile land, yielding to its present proprietors between \$300,000 and \$500,000 a year. Among such fortunate owners may be mentioned the Coburg Koharg family, of which Prince Philip of Coburg, brother-in-law of the late Crown Prince Rudolph, and brother of Prince Ferdinand, the present Prince of Bulgaria, is the head.

Of the different "Pusztas," the largest is that of Hortobágy, in the vicinity of the city of Debreczen. This contains an area of 52,000 Hungarian acres (1 Hungarian acre=1.183 American acres), the greater portion of which has never yet been plowed. The waste territory was formerly a marshy, reedy swamp, but after the irrigation of the Tisza it became all pastoral land, where over 50,000 cattle and sheep are now tended, and where the celebrated studs of many thousand colts are reared. These colts run about wild up to their second or third year in the full delight of liberty, and it requires much skill, only equaled by that of our western cowboys, to capture and tame them when required for training purposes.

The crop on the other side of the Danube is light; there is a fair middling crop on this side and a good crop in the eastern part of the country. In Transylvania, the crop will be a light one. According to the known data at hand, Hungary may have a surplus of 22,000,000 to 24,000,000 metric centners* of wheat. In the past year, there was a surplus of a clear 22,000,000 metric centners. The distribution of exports will be seen by the following data:

Description.	January to June—		Description.	January to June—	
	1895.	1894.		1895.	1894.
	<i>Met. cent.</i>	<i>Met. cent.</i>		<i>Met. cent.</i>	<i>Met. cent.</i>
Wheat.....	2,499,226	2,173,711	Oats	380,142	258,460
Rye.....	717,840	859,217	Corn	416,473	1,095,589
Barley.....	919,578	740,734	Flour.....	3,002,234	2,939,818

The imports of grain were much less this year than in the preceding year, viz:

Description.	January to June—		Description.	January to June—	
	1895.	1894.		1895.	1894.
	<i>Met. tons.†</i>	<i>Met. tons.†</i>		<i>Met. tons.†</i>	<i>Met. tons.†</i>
Wheat.....	33,562	71,274	Oats.....	7,624	7,604
Rye.....	1,084	907	Corn	41,332	20,180
Barley.....	17,268	18,740	Flour.....	3,730	3,450

* 1 metric centner=220.46 pounds.

† 1 metric ton—2,204.6 pounds.

The total grain trade of Hungary in the year 1894, was:

Description.	Imports.	Exports.	Surplus ex-ports.
	<i>Met. tons.</i>	<i>Met. tons.</i>	<i>Met. tons.</i>
Wheat.....	118,632	511,898	393,266
Rye.....	3,192	202,173	198,981
Barley.....	29,541	359,441	329,900
Oats	15,736	83,662	67,926
Corn.....	48,715	156,947	110,232
Flour.....	6,264	596,966	590,702

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *August 12, 1895.*

FLOUR TRADE OF HUNGARY IN 1894.

In my report of June, 1894, on "American Flour in Foreign Markets,"* I showed that our flour had achieved a signal victory in England, where, in the years 1891, 1892, and 1893, it had reduced the Hungarian importation from 15 per cent of the total supply in 1891 to 8.5 per cent at the close of 1893, and that it was destined to crowd out Hungarian flour in the more accessible western markets. I am more convinced of this to-day than ever, and I think it opportune at this time to give a review of the flouring industry of Hungary for the whole year 1894.

Discouraging conditions prevailed along the whole line, with little prospect of amelioration. During the year there were overproduction and loss. Even the autumn business, which had always before been profitable, proved a failure, as the mills, in expectation of improved foreign sales and trusting to the Austrian market, had made large purchases of wheat on speculation, and at a price far above the attainable prices for flour. As none of these expectations materialized, and Austria, too, had an abundant harvest, the decline of the prices of wheat could not possibly be of any advantage. The milling industry, having already gone through so many trials, had never before seen such an extremely bad year.

Although a continual aggravation of the condition of the flouring business has been noticeable for a series of years, there were certain periods in which the mills were enabled to work, at least for a certain time, to advantage; but in the year 1894, there was no such favorable period. From beginning to end, there was an insurmountable disproportion between the prices of the raw and the finished product, and this disproportion was still further increased owing to the fact that the prices for foreign export, already calculated at a loss, were destined to undergo a further decline.

The mills failed to employ the only successful means to put the flouring business on a sound basis, namely, the curtailment of production. Favor-

* Printed in CONSULAR REPORTS No. 168 (September, 1894), p. 24.

able rates of freight for the transportation of flour to England by railway, between Budapest and Fiume, could not be obtained, and hence the mills were helpless against the depressing situation. Reduction of the costs of management was tried here and there, but proved to be ineffectual, owing to the lack of general effort.

The millers seemed to forget that the effect of the increased purchase of wheat and an accumulation of unsold stock must necessarily cause an abnormal condition. The uninterrupted demand of production on the fullest capacity of the mills was consequently attended by the doubling of efforts to obtain sales for the immense production, and rendered an improvement in prices quite impossible. The hope of improvement naturally had some effect, but successive disappointments soon showed that the prevailing depression in all breadstuffs meant not only a transient crisis, but a chronic state of things, which had to be met one way or another. The high figures for cereal and flouring products, appearing in the stock accounts of the mills for December, 1894, spoke volumes in themselves and could not fail to convey an impressive warning; for though a large portion of that stock may have been sold in advance, still the daily addition of large quantities of flour products kept up the ominous disproportion between production and consumption, for the Austrian markets had very considerably diminished their purchases owing to a good crop of wheat at home.

This experience has induced most of the mills to reduce their output, but such action, unless it secures the cooperation of all, can have no perceptible effect.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *June 30, 1895.*

FLOUR EXPORTS FROM HUNGARY.

In the first six months of 1895, the flour exports of Hungary amounted to 300,223 metric tons, against 293,982 metric tons in the first six months of 1894. The largest quantity of this flour, namely, 70 to 75 per cent, was sent to Austria. The exports to the different countries during these periods were:

To—	1895.	1894.
	<i>Metric tons.</i>	<i>Metric tons.</i>
Austria	227,402	224,953
England.....	31,343	28,321
France.....	3,865	7,680
Germany.....	9,432	8,124
Switzerland.....	1,771	2,183
Brazil.....	3,675	3,290
Bosnia.....	5,412	3,386
Other states.....	17,324	16,046
Total.....	300,224	293,983

Under the head of "other states" are to be included those shipments of flour which go by Fiume to the transatlantic states, chiefly to South America.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *August 14, 1895.*

HUNGARY'S FLOUR TRADE WITH BRAZIL.

The exports of flour in December of last year from Austria-Hungary to Brazilian seaports amounted to 11,753 barrels, against 9,632 barrels in the same month of 1893, of which 9,628 barrels were from Hungarian mills. During the whole of last year the total exports to Brazilian seaports amounted to 116,694 barrels, of which 91,594 barrels were the output of Hungarian mills.

It is interesting to note the movement of this trade, as it shows what fluctuations it had to go through; also, the participation of Hungarian mills therein. There were carried via Fiume and Trieste for shipment the following quantities of flour:

Year.	Total.	From Hungarian mills.
	<i>Barrels.</i>	<i>Barrels.</i>
1894.....	116,994	91,594
1893.....	121,730	86,510
1892.....	96,780	60,935
1891.....	130,312	93,453
1890.....	214,504	150,384
1889.....	272,697	167,804
1888.....	214,616	143,151
1887.....	188,873	177,960
1886.....	176,960	85,728

Since 1890, the exports of flour have been sensibly reduced on account of the lowering of the import duties on American flour; but this fact has not pushed out the Hungarian article, because, at equal import duties, the Hungarian flour has good prospects of reaching again the old figures of exports, on account, it seems, of its being preferred when the cost is equal. Nevertheless, it is necessary that the steamship companies which carry that trade, viz, the Hungarian Adria and the Austrian Lloyd, should lower their freights, and great pressure is being brought to bear to induce them to do so; otherwise it will not pay the mills here to export. The volume of these exports shows the necessity of keeping up these two regular steamship lines, because other Mediterranean ports could not give the proper shipping facilities. The traffic from Fiume and Trieste through the Austro-Hungarian steamship companies has a peculiar advantage, as Brazil sends back as freight large quantities of coffee, which find in Trieste the largest Austro-Hungarian

market, and also because Fiume has now a growing trade in that article, which is favored through differential import duties in these two Adriatic ports.

E. P. T. HAMMOND,

Consul.

BUDAPEST, *April 29, 1895.*

SUPPLEMENTARY REPORTS.

The flour shipments from Fiume and Trieste to Brazilian ports amounted to 18,842 barrels in July, 1895, against 9,005 barrels in July, 1894. There were 13,875 barrels shipped from Hungarian mills, against 7,270 barrels in July, 1894. The exports from the 1st of January up to the 31st of July were :

Description.	1895.	1894.
	<i>Barrels.</i>	<i>Barrels.</i>
From Hungarian mills.	62,488	49,935
From Austrian mills.....	16,212	12,785
Total.....	78,700	62,720

It will be seen that the Hungarian flour exported to Brazil has this year increased considerably ; the Budapest establishments are principally engaged in it. It is well known that for many years the Hungarian mills have tenaciously kept up their trade with Brazil.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *August 11, 1895.*

The shipments of flour from Fiume and Trieste to Brazil in the month of August, 1895, amounted to 8,162 barrels, against 9,260 barrels in August, 1894, of which 6,467 barrels came from Hungarian mills against 8,015 barrels in 1894. The total exports from the 1st of January, 1895, up to the 31st of August, amounted to the following :

Description.	1895.	1894.
	<i>Barrels.</i>	<i>Barrels.</i>
From Hungarian mills.....	75,810	57,950
From Austrian mills.....	11,046	14,030
Total.....	86,856	71,980

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *September 13, 1895.*

HUNGARIAN FLOUR EXPORTS TO ENGLAND

The favorable steamship rates accorded to the Hungarian milling industry, has enabled it to keep up its position in England against foreign competition. According to official data, the flour exports to England in the past six months show a considerable increase. The exports to the different ports of England for the same period of 1895, 1894, and 1893 were:

To—	1895.	1894.	1893.
	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>
London.....	7,802	8,284	7,388
Glasgow.....	7,037	6,680	6,214
Liverpool.....	5,806	9,547	8,583
Manchester.....	4,711		
Leith.....	1,643	1,566	1,725
Hull.....	700	691	806
Grimsby.....	1		
Total.....	27,700	26,768	24,716

It will be seen, therefore, that during the first six months of this year, there was an increase of 982 metric tons over the preceding year, and an increase of 2,984 metric tons over 1893. The increase is mainly in the exports to the western ports of the Kingdom, namely Liverpool, Manchester, and Glasgow, no special change being noticed in the exports to the eastern portion—London, Leith, and Hull. Manchester has opened a direct trade, through a newly-founded shipping line, since the opening of the Manchester Canal.

The exports to Ireland were not so favorable as the exports to English and Scotch ports. The insignificant trade to Ireland goes by the Liverpool route, there being no direct shipping line. The United States supplies Ireland, and has entirely supplanted the Hungarian flour, owing, as the Hungarians say, to the unfavorable conditions of living, which induce the poor people there to buy a cheaper flour.

E. P. T. HAMMOND,
Consul.

BUDAPEST, *July 30, 1895.*

HUNGARY'S TOBACCO ADMINISTRATION.

The income of the tobacco administration of Hungary amounted in 1883 to 20,019,401 florins (\$8,127,878), and in 1893 to 30,824,269 florins (\$12,514,153). The increase is, however, scarcely preceptible in the years 1894 and 1895.

The administration of the industry seems to have provisionally reached its culminating point, notwithstanding the Hungarian tobacco management

shows a much greater increase of receipts than the Austrian. Hungary shows an increase in the last two years of 2.1 per cent, while Austria shows only eight-tenths of one per cent.

The Hungarian Government has complete control—amounting to a Government monopoly—of tobacco. A private individual can not, for his own use, raise an ounce of tobacco; it must be turned over to the Government, the latter granting the privilege of raising it.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *August 30, 1895.*

HUNGARIAN WINE EXPORTS TO INDIA.

It may be of interest to our wine producers in the United States to know that the Bombay agency of the Commercial Museum of Hungary reports a good market for Hungarian wines in Bombay, Delhi, and Calcutta. It is confidently anticipated here that the export of Hungarian wines to India, which is already an important one, will increase from year to year. In the Times of India, a Bombay newspaper, Hungarian wines are warmly praised for their genuineness.

EDWARD P. T. HAMMOND,

Consul.

BUDAPEST, *August 23, 1895.*

HUNGARIAN EXPORTS OF SUGAR, SPIRITS, AND PLUMS.

The transactions in sugar, spirits, and plums exported by sea from the Hungarian, as well as Bosnian provinces, amounted in the half year ended June 30, 1895, to the following quantities:

To—	Sugar.		Spirits.		Plums.	
	1895.	1894.	1895.	1894.	1895.	1894.
	<i>Met. tons.</i>	<i>Met. tons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Met. tons.</i>	<i>Met. tons.</i>
Trieste.....	8,280	6,050	161,672	432,947	233	645
Fiume.....	5,400	1,095	23,775	100,384	1,069	1,808
Total.....	13,680	7,145	185,447	533,331	1,302	2,453

It will be seen that there is a considerable increase in the export of sugar (refined) via Trieste, but a corresponding decrease in spirits and plums, owing to an unforeseen conjunction of circumstances, as the United States being the largest purchaser of spirits and plums bought but little, and expectations did not materialize, and the exports to other countries did not equalize the consequent loss.

450 COMMERCIAL DUTIES OF AUSTRO-HUNGARIAN CONSULS.

In the last half of the year 1894, the exports of Hungarian sugar to Trieste amounted to 8,275 metric tons; to Fiume, 5,400 metric tons; total, 13,675 metric tons. The sugar exports by sea (from Austrian and Hungarian factories) showed the following quantities up to the end of June, 1895, to foreign countries:

To—	1895.	1894.
<i>Via Trieste.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>
Turkey	22,370	22,404
Greece	3,478	3,276
Gibraltar (Great Britain)	588	1,110
Bulgaria and ports of Black Sea	3,645	2,361
Egypt	2,022	1,257
Malta, Tunis, and Tripoli	2,226	2,736
Italy	716	5,600
Syria	3,156	3,373
East India	697	70
<i>Via Fiume.</i>		
Gibraltar (Great Britain)	458	393
Italy	3,782	10,345
Malta and Tunis	83	142

There were also exported via Fiume to other ports of the Adriatic and Mediterranean seas, considerable quantities of sugar, but the detailed figures are not obtainable at present. It will be seen from the above data that there is an increased export to Greece, Egypt, and the regions of the Black Sea, as well as to East India, with a corresponding decrease to Great Britain, Malta, Tunis, Tripoli, Syria, and especially to Italy, whose importation via Trieste and Fiume amounted in the past six months to 12,064 metric tons less than for the same period in the year 1894.

E. P. T. HAMMOND,
Consul.

BUDAPEST, *July 16, 1895.*

COMMERCIAL DUTIES OF AUSTRO-HUNGARIAN CONSULS.

I have the honor to transmit an abstract from the new consular regulations for the Austro-Hungarian consular officers concerning their commercial duties. In translating this extract, which I took from the Handels Museum of Vienna, I have found many valuable suggestions for our own consular service.

In printing this abstract, the Handels Museum makes the following introductory remarks :

The great development of the foreign trade of all countries in the last twenty years, has caused a corresponding increase in the functions of consular officers of all commercial states. Not only the number of consulates but also the duties of these officers have grown in quite a remarkable manner, and, at the same time, the interest of all commercial and industrial circles in the development of so important a factor for the protection and the active furtherance of the export trade. This interest, however, is purely practical, and is manifested only by

the attention paid to consular officers on the part of commercial circles. It is unfortunately evident—the practical man may observe this daily—that the vast majority of our merchants have only vague conceptions of the duties of a consular officer. The consequence on the one hand, is that demands are made of these officers to which they can not possibly accede, while on the other hand, the merchants only too often neglect, merely from ignorance, to claim the valuable aid of the consular officers, or to take advantage of those facilities for gaining information which, as a result of the systematic periodical consular reports, stand at the general disposal. The commercial duties of the consular officers are contained in various circulars, which have hitherto not been easily accessible. Now, that these have been collected and abstracted, we are enabled to form a clear and rapid survey of the directions they contain.

THEO. M. STEPHAN,
Consul.

ANNABERG, *September 26, 1895.*

EXTRACTS FROM CONSULAR REGULATIONS OF AUSTRIA-HUNGARY.

Consular officers are bound to further actively the interests of the Austro-Hungarian Monarchy in commerce and navigation; also, those of the merchants of both divisions of the state; to represent the latter before the authorities of the country willingly and effectively in matters of this nature, in so far as these give a reasonable claim to protection or support, and, at the same time, assist them by word and deed.

The protection of our foreign trade forms one of the most important duties of the consular representatives, and consists (1) in the energetic protection of just claims, especially of such as are based upon the infringement or evasion of the stipulations of existing commercial and navigation treaties; (2) in affording as much assistance as possible in cases where our commercial interests are threatened by private rights.

It is further the duty of the consular officers to bring to the knowledge of the Foreign Department everything which concerns the commercial interests of the monarchy in anyway whatever. They will have to observe closely all trade and navigation movements, the Austro-Hungarian as well as the foreign, within their districts, and to collect reliable data on the subjects. Their observation must be extended especially to ascertain what articles of trade of the Austro-Hungarian Monarchy are, or might be, in demand in their districts, and to what causes the increased or diminished sale of the products of the monarchy is to be ascribed. On the other hand, the consular officers must devote themselves to a thorough, continuous study of the products, trade, and means of communication of the country or district of their activity. The consular officers are to acquire as exact a knowledge as possible of the economic conditions of the Austro-Hungarian Monarchy.

Reports and information.

The consular officers are to observe carefully and continually, and bring to the knowledge of the Foreign Ministry, all laws, instructions, and regulations in the consular district concerning trade, duties, navigation, public highways, etc. They are also to follow with attention the progress of agriculture, industry, trade, and shipping in the whole of their district, and to report the results of their observations. Especially in reports on the establishment of large industrial undertakings, the conditions of the industry concerned must be closely discussed. Lastly, the consular officers are required to draw up reports on successful inventions in the field of industry, in matters concerning railways, telegraphs, and shipping; also, to supplement these reports, as far as possible, with drawings or designs. In general, consular officers are bound to no fixed rules for procuring statistical or other material for their commercial reports. In the Ottoman Empire, however, it is indispensable that the consular officers, by reference to

well-informed reliable experts, whom they must take care to select if possible from the natives, obtain the most thorough information concerning trade and commerce in their districts. Only in places where reliable and intelligent elements are wanting, may the hearing of experts be omitted. Otherwise, however, the consuls are requested to keep in touch with the leading merchants, and consult them frequently upon the conditions of trade.

All statements, observations, inferences, or practical hints relating to commerce or economic matters, and which, in the opinion of the reporting consul, are not suited for publication, are to be separated from the periodical reports and made the subject of a confidential report. In such cases where confidential matters must find, for their better understanding, their place in a periodical report, it will be necessary to state in the introduction that the report contains confidential information; further, it is to be added whether these reports are intended only for the information of the Government, or whether they shall also be brought to the knowledge of commercial circles in a confidential manner.

The annual report.

The discursive yearly report shall comprise in a more general way all that experience and information which the consular officers were able to gain concerning the trade and commerce of their consular district. At the same time, the more important questions of a social and economic nature are to be treated, such as the labor questions, matters concerning factories, railways, telegraph, post-office, banking and credit, etc., in so far as they affect their consular district. The yearly report has especially to comprise a statement of the total trade by land and sea during the past year—export, import, and transit—together with all statistics relating thereto; the average prices of goods, exchange rates, land and sea freights, data concerning goods remaining in stock, production, results of harvest, etc. It must supply a statistical statement of the direct trade and shipping between the monarchy and the seaport or inland port of the consular district, and show the difference between these results and those of former years. Lastly, mention must be made of those circumstances which are likely to have a beneficial or retarding influence on trade and commerce.

Special attention must be paid to agricultural questions, and a thorough account be given not only of the results of the harvest in the district, but also of those causes which produced the result. Besides the general circumstances to be mentioned, an account should be given and details collected concerning, for instance, the rates of agricultural wages, the increased employment of agricultural machines, the progress in agricultural improvements, the bringing of new land under cultivation, the forests, dairies, and the improvements which may be made in them, fruit culture and prices, improvements in breeding, etc. With regard to the latter, it is desirable to point out the breeds which are the favorites in the consular districts, and how far they correspond with the requirements. Further, a report should be given to the measures taken or intended to be taken for the improvement of cattle breeding. Finally, it is to be desired, in the interest of the Hungarian State forests, that the consular officers in Turkey, Greece, and the Danubian countries should give a thorough account of the prices and sales of pine wood; those in France, Germany, England, Spain, Italy, and Belgium, on the other hand, of oak and other hard woods.

The trade statistics should contain a comparison with the previous year of the imports and exports as to quantity (gross or net always to be stated), value, or quantity and value. As a statement of the number of packages and cases is not adapted to any kind of statistical account, it is to be omitted from the report. In case it seems impracticable to give a general statement of weights and values, even in an estimate, the weight or value of the most important articles of trade should be estimated approximately. It should be expressly stated whether the figures are exact or only approximate. Where a statement of the origin and destination of goods can not be given, except by mere supposition, it is sufficient, in the case of seaports, to state what quantity of the goods has been imported and exported by each of the competing ship companies. The international competition in the various articles of trade should be shown in figures as far as possible, or at least approximately.

In the discursive reports of the seaport consuls, special attention should be given to the emigration from Austria-Hungary, and with a view to render the statistics on this subject as complete as possible the publications of the foreign marine authorities, harbor offices, etc., on the yearly emigration from Austria-Hungary are expected to be sent in. The yearly reports from Roumania are to be laid before the Foreign Ministry at the latest by April 1; those from the Ottoman Empire, by April 30; those from Great Britain and her European possessions and the East Indies, by May 31; those from Bulgaria, East Roumelia, Servia, and Greece, by June 30; those from the colonial possessions of Great Britain, excepting the East Indies, and those from Italy, Russia, and Egypt, by July 31.

Quarterly and monthly reports.

The consular officers in Europe are required at the end of each month (those outside Europe at the close of every quarter) to draw up a report on markets, prices, stocks, exchanges, inventions, customs laws and regulations; also, upon matters of trade, shipping, industry, coinage, weights and measures; credit and communication by land and water, new harbor rules, the arrival and departure of vessels, and any event which may be specially interesting; finally, upon the commercial occurrences that may have taken place, new industrial enterprises, failures of important firms, etc. Special attention is to be given to the trade with the monarchy, and a statement made of the articles of Austrian or Hungarian production which are in demand, and further, of the markets open for these products. Agricultural notices generally, details of trade and business in agricultural produce, information concerning matters which appear of importance to agricultural institutions, etc., require the attention of the consuls, and may be treated either in the periodical trade report, or may form the subject of a special report.

Reports on seed and harvest.

Consular officers are expected to draw up a report on agricultural matters at the important seasons in the agricultural year, as in spring, when the condition of the seed can be examined; especially, however, before and after the harvest.

Special reports.

To the special reports, belong the announcements to be made to the Foreign Office on subjects of commercial policy in general, duties and tariffs, ocean and river navigation, sanitation, railways, post and telegraph, coinage, weights and measures, and other matters of interest, especially such as concern the demand for agricultural and industrial products of the monarchy, and the markets open to them. In urgent cases, as when events occur which are of importance to trade and shipping, and which may have an immediate bearing on the direction of commerce, the special announcements, which may be telegraphic, must be addressed directly to the Ministries of Commerce both of Austria and Hungary.

All laws, regulations, etc., proceeding from the government of the country where the consulates are located referring to trade, industry, and shipping, or in any way affecting the economic condition of the people, must be sent directly to the bureau of statistics of the Ministry of Commerce in Vienna immediately after their appearance, independently of the reports sent to the Foreign Ministry. They should be sent as authentically reproduced in foreign newspapers, suitably selected, and, if possible, translated into German, or, at any rate, in the original text.

Consular officers are required to report to the Foreign Ministry on all important events relating to railways, as projects of such, Government bills and laws relating thereto; occasionally, on the debates of the Chamber on these subjects, on the opening of new lines in those states which are conterminous with the Empire, or lie in the direction of important routes for Austro-Hungarian trade. Careful attention is to be paid to impending tenders and contracts, and, if possible, to take care that knowledge of them be acquired before they are officially published; at all events, to forward home without delay all details as exact as possible as soon as the announcement appears. This information is to be sent directly to those

firms which have given their names previously with a statement of the articles, or the sort of goods they supply, or the building operations which they carry out, and have filed at the consulate a certificate as to their ability from the chamber of commerce. In cases where a direct communication of the consular officers with the firms at home is, for special reasons, not advisable, or, if the means for the communication of such information to the parties interested are not sufficiently provided for, such information is to be sent to the chambers of commerce and the commercial museums at Vienna and Budapest. However, it is permitted to impart such information to others than the said chambers of commerce, if it may be assumed that the object is more likely to be attained in this way, as in the case of many specialties which are only produced in certain districts. A further copy of the said information is to be sent to the Austrian and one to the Hungarian Ministry of Commerce, in the latter case mentioning those Hungarian places and corporations to which the said notification has been sent.

Where a confidential treatment of expected tenders appears advisable on account of foreign competition, the attention of the respective chamber of commerce, trade museum, etc., is to be called to the fact. However, it is to be expected in all these cases that the information regarding tenders will be forwarded to their addresses with that rapidity which is one of the most essential conditions of successful competition on the part of our home industries.

As soon as a consular officer learns of the methods of swindling firms, or of notoriously bad payers and habitual tricksters, and if it is to be feared that, through such firms, Austrian or Hungarian manufacturers might possibly suffer loss through connections with such firms, a due warning should be sent immediately to both trade ministries of the monarchy, which will make use of the information in a discreet manner, and without stating its source.

The consular officers are expected to bring to the knowledge of the foreign ministry all modifications made in the customs tariff, such reports to be drawn up in three copies. Here, however, it is not only a question of merely mentioning changes in the custom laws, commercial treaties, and other agreements already carried into operation, but of the due notification of such measures even if they should be only in a preliminary stage. Likewise, the Foreign Ministry requires regular information of important movements, which might influence the customs policy of a country. The consular officers are expected to procure a copy of the customs tariff of the country in which they reside, and to enter into all changes which may occur.

Apart from the periodical reports, it is open to the consular officers to make their own observations on all matters the subject of special reports; on specially important matters, however, where rapidity is desirable, the announcement should be made under all circumstances at once and separately.

Consular officers will have to ascertain as carefully as possible from the most reliable sources the suspension of payments or failures which occur in their districts; and if it may be assumed with certainty that Austrian or Hungarian circles are affected thereby, to acquaint the commercial or industrial chambers, by letter or telegraph, according to the importance and urgency, from which the quickest information of the parties concerned may be expected. It will frequently be most expedient to address such information to the chambers of commerce in Vienna or Budapest, or to both. If, however, a consular officer has direct information from a merchant at home that he has business relations with the insolvent firm, and if such merchant has previously expressed a wish to be directly informed, by letter or telegram, of the suspension of payment, or the financial difficulties of his foreign debtor, this wish is to be complied with as speedily as possible. The leading consulates are required to take care that their subordinates or responsible persons forward such notices as quickly as possible, and that these reach the monarchy without delay.

Exhibitions, whether held periodically or not, are among the subjects for commercial reports. However, such reports shall not confine themselves to merely mentioning exhibitions already held, but shall also embrace all information concerning suggestions, projects, and public discussions relating thereto. The consulates shall therefore devote special attention to exhibitions, and continually keep the Foreign Office informed of their observations. It is

sufficient to mention smaller undertakings in the periodical reports, whereas large ones, or those which are of greater importance to Austro-Hungarian merchants, are to be described in a special report. What is of most importance is a timely report and a statement whether the exhibition has a purely private or official character, with what funds it is provided, its object, and the results expected. In cases where international competition is allowed to enter, it is necessary to send the programmes as early as possible—several copies where it can be done

Replies to commercial questions and information as to credit.

Consular officers must reply as speedily and fully as possible to all inquiries of the central authorities of the monarchy, of the chambers of commerce and industry, or other public commercial and industrial corporations, agricultural unions, scientific establishments, etc., concerning matters of trade, shipping, agriculture, and industry. Every question relating to commerce must be answered as quickly as possible, even if the reply should be negative. Inquiries which for some reason can not well be answered directly are to be sent immediately to the Foreign Office, accompanied with a special report.

Inquiries made of the consulates concerning the financial standing of foreign firms, if reliable information on the subject can be obtained, are to be answered under the following conditions: The choice of referees, who may be employed in such inquiries by the consul, is not limited; the only condition required before giving information is that the references are competent and perfectly reliable. It is, therefore, open to the consul to consult not only trading corporations, but also individuals of undoubted solidity and trustworthiness; yet it is advisable in this case to question, if possible, two referees, but only persons not competing with the firms in question. The information is to be given in definite, simple, and practical form, as is usual in business correspondence, at the same time keeping the following points in view: (1) How long the firm has existed, and in what branches does it transact business; (2) whether the firm is entered in the commercial register or not, in case such register exists; (3) what is known of the standing and character of the said merchant; (4) whether the firm has been insolvent before, once or several times, or is it known to adopt underhand practices in accepting goods or in making payments; (5) what is known as to the means of the firm in general. It will depend upon temporary and local circumstances whether, in particular cases, other matters should also be taken into consideration.

Inquiries for information as to credit which reach the consulates through the inquiry office of the Vienna Chamber of Trade and Industry are to be answered direct under all circumstances. In so far as such inquiries reach the consulates through other chambers of commerce at home, through the Austrian Commercial Museum, the Austro-Hungarian Export Union, or the Vienna Mercantile Union, and other corporations which offer certain guarantees, there can be the less objection to a direct reply, as the intervention of these institutions is to be considered a recommendation; yet such inquiries can also be referred to the above-mentioned center for commercial information—that is, to the inquiry office of the Vienna Chamber of Trade and Industry, when this seems expedient, on account of simplification or identity of the inquiries or on account of the discreet nature of the information. In case inquiries as to the credit of individual Austrian firms should come directly to the consular offices, the inquiries are to be referred, as a rule—especially if the firm is unknown to the consulate—to the inquiry office of the Vienna Chamber of Commerce or the proper chamber of trade and industry. Inquiries from individual Austrian firms, which are specially accredited and offer a guaranty for a considerate and discreet use of the information, are to be answered directly only in exceptional cases. The inquiries of private agencies and offices, which give information in the way of business, are to be left unanswered in all cases. From the existing rules and usages at the consulates, an obligation to pay the postage for a reply in party matters can not be construed. The domestic inquiries may, therefore, either inclose the postage for a reply in money or in Austrian or Hungarian stamps of equal value, or in money or stamps of the country where the consulate is situated; otherwise, to ask for an

unfranked reply. The Austrian or Hungarian stamps are, of course, not intended for the postage of the reply, but are simply to be considered as convenient for settling small accounts at home.

Collections.

As it is the duty of every consul to protect and support Austrian and Hungarian subjects in all just claims, and to assist them, therefore, in recovering outstanding amounts, every consul shall comply with a well-grounded request of this kind. If, however, a friendly settlement is impossible, and it becomes necessary to take legal steps, it is the duty of the consul to name to the party at its request a suitable legal representative, and to grant to the latter the full protection of the consulate for carrying legal proceedings into effect. If amounts are recovered in this way, the consul is to dispose of them according to the directions of the parties justly entitled to them; in cases, however, where there are no such directions, to send the amount to the rightful owner at the latter's risk or through the competent authorities; if this is impracticable, to treat these sums as official deposits, and to observe the instructions relating thereto.

UNITED STATES CONSULAR SERVICE AND FOREIGN TRADE.

It is an undeniable fact that many avenues are open abroad to the introduction of American products and manufactured articles of which no advantage is taken. This is especially the case in Germany, and in Europe as a whole. There is scarcely a consular officer in Europe who can not point out in his district opportunities for the extension of American trade. The fact is patent to all of them that many American articles of superior grade to those of European production are not to be found in Europe, or, if found, only in insignificant quantities, though no serious obstacle exists to their introduction. There is no doubt that the export trade of the United States can be increased by many hundreds of thousands of dollars yearly. To say that it is "a consummation most devoutly to be wished," is but to repeat a platitude. From that opinion, no dissenting voice will be heard.

But how is it to be done?

The answer, in the opinion of the writer, is intelligent cooperation of the American producer with the consular service. In what manner that cooperation may be brought about, it is the aim of the present article to show.

It goes without saying that an association of manufacturers having the general good at heart and having more money to expend in experimenting than the individual producer, can accomplish far more than the latter. It is through such association of forces that the desired end is to be reached.

Under the present system, consuls, often excellently prompted by the Department, but generally of their own initiative, make reports on various subjects, which are printed by the Department and furnished to the press. The particular manufacturer may or may not find in one of these reports suggestions of value to him. In the supposition that he does, we find him confronted with the difficulties of lack of more detailed knowledge or the expense of individual experiment. The spur of necessity with him not being

so sharp as with his competitors overseas, he is not goaded into equal enterprise in finding new markets, despite the difficulties. The result is, he does nothing, and the German or English producer gets the market. In many cases the latter secures it with an article inferior to the American, for which he procures a most satisfactory price. Through his trade associations, his manufacturers' unions, and individual enterprise, he obtains exact information as to what the people in foreign countries want, and whether it can be furnished from abroad better than at home. Having satisfied himself on this point, he next learns whether the foreign consumer has any predilection or prejudice in favor of or against a particular form of packing, preparing or labeling, and this he follows exactly. The result is seen in the yearly increase of English and German exports.

What is the policy of the American producer? Leaving out the unfortunately too few of an enterprising nature and considering him in general, we find that he pays little or no attention to foreign prejudices. The foreigner may buy his goods as they are, if he wants them; if not, he can leave them alone. He makes no concerted effort to inform himself as to foreign requirements, and, in consequence, his competitors, who study their business as a good lawyer does the statutes, takes the prize of exports away from him, though, in many cases, laboring under disadvantages of distance, unintelligent labor, or inferior or more costly raw materials.

The Government has provided the American manufacturer with machinery in the consular service, which, despite the uncertainty of tenure of office, is unexcelled in the ability to serve him in gathering information. He makes practically no use of it, or, if he does, it is in a fitful and intermittent manner. The results are nil, and he perhaps blames the service, which, though undoubtedly not so efficient as it might be, will still compare favorably with any in existence.

What is the remedy? That, it is the present endeavor to show. Consider one trade and let it stand as an example for all others. Let that one be the furniture trade. Let the Furniture Manufacturers' Association come together within a certain time in executive session. Let it formulate a series of questions embodying every particular in which the producers desire information, with a view to extending their trade with, for example, Germany, the same mode of procedure holding good for any other country. Let this series of questions be sent to the Department of State for transmission to the consuls serving in the particular country indicated. Let the consuls in that country be given a definite time, not too long in which to report, and let them, through local chambers of commerce and local dealers, discover just what the local opportunities and requirements in that particular trade are, and report thereon. Up to this point, the procedure is practically that which exists at present, except that the Department of State instead of the manufacturers' association takes the initiative, and, accordingly, the questions can not be expected to be so comprehensive as if they emanated from experts.

The innovations to be suggested now appear. All of the consuls having reported, let the reports be published by the Department of State and furnished to the manufacturers' association requesting the information. Should the manufacturers' association find that reasonable opportunity exists in the country named for the extension of their products, let them so inform the Department of State. Let the Department then authorize the consuls at the chief places of the indicated country to hire a commodious exhibit room in the business center of the city, this exhibit room to be a permanent institution, and its cost to be defrayed by charging each manufacturers' association which might make use of it a reasonable sum for the service. Let samples selected by the association be shipped to such consuls as might be selected by the Department. Let the consul be instructed, then, to invite the dealers and other business men interested in that line of trade to an inspection of the articles on a given day, and let him, with data furnished by the association, make a brief address explaining the salient features and advantages of the goods in question. Let him also ask for suggestions as to alterations or changes to meet popular taste or prejudice, and let these be embodied in a supplemental report to be sent to the association through the Department. Let him also, after such a conference, put the individual dealers in possession of the addresses of every individual firm composing the association, and then let the matter be conducted further between the local dealer and such one of the firm as he may select.

Such a procedure followed by the Furniture Manufacturers' Association would, in the opinion of the writer, give a tremendous impetus to the export of American goods, and the splendid opportunity existing in Germany for the extension of this trade is only one of many which exist.

The expense taxed upon each association, the different trades associations of the country being accorded the opportunity in turn for the exhibit rooms would be small. Except in the larger consulates, no additional clerks would be necessary, and the reports and exhibits could and should be made once a month. That it would entail much additional work upon the consuls is undoubted, but to bring about results is what they are in their positions for. That it would presuppose a knowledge of the language of the country, except in barbarous or semibarbarous nations, is also true.

The tremendous result which would accrue to the benefit of any particular trade through the intelligent and simultaneous exposition of its merits by the different consuls of the United States at all the principal places in the world can well be imagined. It is a result which the individual producer could never secure, but which is possible to him working in connection with his trade brethren in systematic and intelligent cooperation with the Department of State. The plan gives him the benefit of concentration of strength, while through the system of furnishing local dealers with the names of all members of associations, it preserves his individual freedom and possible superiority in facilities for production as against his home competitors, all of whom are put in possession of the same information and

then left to make prices and other arrangements as may seem to them best.

The opportunity is there. The machinery is in existence. It requires but little to put it in motion, but will the manufacturers of the United States bring to bear that little? It is a question they alone can answer.

E. W. S. TINGLE,
Consul.

BRUNSWICK, *October 10, 1895.*

SOCIETIES AIDING GERMAN TRADE.

The wonderful advance made by Germany in the past few years in her export trade is unquestionably due, in a large measure, to the endeavors of such societies as the Stuttgart Geographical Society. During the winter season, this society gives lectures one evening each week, not by scientific persons only, but by practical business men and travelers, who have recently visited foreign countries. The large hall in which these lectures are given is insufficient to seat the public, and frequently people remain standing during the hour and a half to which the lectures are limited. All classes of society attend the lectures, and everyone seems eager to find some point which he can turn to some material benefit for his branch of trade.

These persevering efforts made by the Germans have revolutionized trade in more than one branch, and, frequently, to the detriment of the United States. To cite a case that is very pleasing to the Germans at the present moment, I give the following figures covering the importation of clocks into Japan during the past three years:

From—	1892.	1893.	1894.
United States.....	50,290	37,108	12,177
Germany.....	43,626	39,018	79,643

It is stated that Switzerland sends no more clocks to Japan, but that the Germans, besides having exported the above-mentioned clocks, have established factories in Tokyo, Kobé, and other places. I can not but believe that could such societies as the Stuttgart Geographical Society be made popular in the United States, their influence there would be quite as marked in its effects on American exports as it has been on German trade.

ALFRED C. JOHNSON,
Consul.

STUTTGART, *July 18, 1895.*

TRANSPORTATION OF WHEAT IN THE ARGENTINE REPUBLIC.

I am in receipt of a dispatch making inquiry in regard to the cost of transporting wheat grown in the Argentine Republic from the farms to the ports of export, with the incidental expenses of storage and elevator and other charges, and instructing me to report on the points mentioned.

FACILITIES FOR GETTING WHEAT TO MARKET.

It may be premised that the facilities for getting Argentine wheat to market are not in any respect so many, so good, or so prompt as they are in the United States. The number of railways running through the wheat regions is comparatively small, and the accommodations the country is yet able to afford, after the crop has been harvested and is waiting to be moved, are seldom equal to the immediate pressure. The demand for cars is greater than the supply, and the wheat has to wait until its turn in the application for transportation has been reached. But, of course, the railway companies are interested in meeting this call for rolling stock as promptly as possible, and, in the course of time, they will increase their facilities in this respect.

WANT OF SUFFICIENT INTERIOR DEPOSITS.

Another drawback which the grain men have to contend with is that there are very few interior storehouses for the general storage of grain. Producers have to depend on the railway companies, and they are greatly lacking in shelter for grain while it is awaiting shipment. The production of wheat for export has come to the front so recently and so suddenly that the warehouses, or *galpores*, along their lines, which, previously, were equal to the calls upon them, are, in the wheat season, insufficient to meet the calls for grain which is waiting for cars. This, also, will be remedied in time. In the two or three seasons past, however, no inconsiderable quantities of wheat have been ruined by exposure at the railway stations. When rolling stock is not ready, and there is storage room, the railway companies agree to receive and take care of the grain for a limited number of days without charge.

THE SHORT CARRIAGE HERE.

Coming now to the questions which I am requested to answer, I have to say in regard to the first that while the facilities for getting wheat from the place of production to the port of export do cut some figure as a feature in the Argentine competition with the United States, yet it must be borne in mind that the Argentine wheat regions are, at the present time, in the provinces of Buenos Ayres, Santa Fé, and Entre Rios—all three bordering on water courses which are navigable for ordinary sized ocean craft—and their

distances from the principal ports of export, in no instance, probably, exceed 150 miles, so that what may be lacking in interior transportation facilities is more than made good by the short distances for which such transportation is needed—in this respect having a considerable advantage over the principal wheat-growing regions of the United States, which are remote from the points of ultimate shipment.

COST FROM THE FARM TO THE STATION.

In regard to the actual cost of transportation from the farm to the port of export, of course it can only be considered in a general way, or by way of average. So far as the expense from the farm to the railway station is concerned, when the farmer has his own sufficient teams and wagons it is little more than the interest on their cost and the outlay for any extra hands which may be required. The expense of keeping the teams is merely nominal, as they are seldom fed, but live on the grasses which grow spontaneously throughout the pampas.

The cost of farm hands is a considerable item, but the wages paid in the Argentine Republic are now much less than they are in the United States. It is estimated that, in spite of the increased acreage in grain crops, the ratio of wages has decreased 50 per cent since 1885. Thus the wages of the ordinary farm laborer in 1885, when gold and paper were more or less equal in value, were \$12, with board. At the present time, owing to the premium on gold, the equivalent would be \$40 in paper money, whereas the usual figure, at the present time, is nearer \$20 than \$40—equal to about \$6 gold per month. Indeed, employees of every kind are suffering from the general shrinkage of wages, which is only partially ameliorated by the fact that the price of food not imported has not risen in proportion to the increased value of gold.* It is for this reason that immigration to this country is now quite at a standstill. The low wages, ordinarily, prevents the increase of surplus hands, ready for emergencies, and thus, when the harvest demands them, the farmer is saddled with an increased expense for harvesting. Owing to this fact, many Italians are now in the habit of coming here to work during the harvest, at a higher rate of wages, to return to Italy when the harvest is over. But even so, the wages of farm hands here are much less than they are in the United States, and the cost of moving grain from the farms to the railway stations is a very inconsiderable item—not 75 cents (gold) per ton.

COST FROM THE STATION TO THE PORT.

As to the cost of transportation from the station to the port of export, each railway has its own tariff, graded according to the distance to the place of delivery or the competition it has with other railways. The principal shipping ports are Rosario and Buenos Ayres, but all along the Paraná and Uruguay rivers there are points where grain is exported directly in ocean-

* The Review of the River Plate.

going vessels. The Paraná River can generally be counted on for from 19 to 21 feet of water, though a bar at Martin Garcia Island, in the La Plata River, sometimes causes a delay to vessels trying to get out. The lesser ports, where cargoes of wheat are put on board, are Colastine, near the city of Santa Fé; Dianente, in Entre Rios, just below the city of Paraná, and Ville Constitucion, San Nicolas, San Pedro, Zarate, and Compana, on the River Paraná de los Palmos; and Concepcion, on the Uruguay River. On the La Plata River is the city of La Plata and the Ensenada Mole, and on the Atlantic Coast, the port of Bahia Blanca. The largest portion of the wheat product, however, is shipped from Rosario, that being the most convenient port for nearly all the wheat-growing regions of the Province of Santa Fé. Buenos Ayres comes next, the facilities it possesses for shippers being the Mercado Central, the Southern Railway Elevator, and the Calalines deposits. The new docks, which otherwise would be most convenient, are not yet provided with elevators or deposits.

The principal grain-carrying railways of the Province of Buenos Ayres are the Buenos Ayres Southern Railway and the Buenos Ayres Western Railway, each having special tracks to the "Boca" port and the Mercado Central.

GRAIN TARIFF OF THE WESTERN RAILWAY.

The following is the tariff in gold on a ton of wheat (1,000 kilograms) from each of the stations on the Western road and its branches to the Central Market in South Barracas, together with the distances, in kilometers, of each station therefrom:

Name of station.	Distance.	Tariff per ton.	Name of station.	Distance.	Tariff per ton.
	<i>Kilometers.</i>			<i>Kilometers.</i>	
Once de Setiembre.....	13	\$1.00	Bragado.....	222	\$3.93
Cobillito.....	17	1.26	Olascoaga	240	4.05
Flores.....	19	1.26	Dennehy.....	257	4.16
Sarsfield.....	20	1.29	Nueva de Julio.....	274	4.20
Liniers.....	25	1.43	French.....	287	4.33
Ramos Mejia.....	28	1.52	Cambacères.....	299	4.40
Hædo.....	31	1.61	Casares.....	322	4.53
Moron.....	33	1.67	Guanaco.....	349	4.66
Ituzaingo.....	38	1.81	Chiclara.....	358	4.77
Merlo.....	44	1.96	Pehuajo.....	376	4.80
Moreno.....	49	2.09	Castelli.....	392	4.88
Rodriguez.....	65	2.33	Passo.....	413	4.98
Lujan.....	80	2.55	Berutti.....	433	5.07
Jaurigui	86	2.64	Prima Junta.....	446	5.12
Olivera	95	2.77	Trenque-Lauquen.....	456	5.16
Gowland.....	104	2.90	La Plata.....	101	2.85
Mercedes.....	111	3.00	Tolosa.	97	2.79
Suipacha.....	139	3.24	Ringuelet.....	95	2.77
Gorostiaga.. ..	155	3.37	Alsina.....	93	2.74
Chirilcoy.....	171	3.51	Pereira.	86	2.64
Benitez.....	184	3.61	Guaterez.....	76	2.49
Alberti.....	200	3.75	Varela	67	2.36
Larrea.....	208	3.81	Claypole.....	61	2.27

Grain tariff of the Western Railway—Continued.

Name of station.	Distance.	Tariff per ton.	Name of station.	Distance.	Tariff per ton.
	<i>Kilometers.</i>			<i>Kilometers.</i>	
Santa Catalina.....	57	\$2.21	Acevedo.....	263	\$4.20
San Justo.....	36	2.13	Guerrico.....	273	4.25
Pereyra.....	88	1.75	Conesa.....	283	4.31
Temperly.....	59	2.24	Rojo.....	298	4.40
Ensenada.....	104	2.90	San Nicolas.....	318	4.51
Keen.....	96	2.98	C. Suarez.....	48	2.06
Azcuénaga.....	115	3.04	Marcos Pas.....	61	2.27
San Antonio.....	131	3.18	Hornos.....	75	2.47
Duggan.....	147	3.31	Las Heras.....	80	2.55
Sarmiento.....	162	3.43	Zapiola.....	95	2.79
Saavadra.....	177	3.56	Lobos.....	112	3.01
Arrecifes.....	193	3.69	Santa Maria.....	127	3.14
Viña.....	208	3.81	Perez.....	146	3.30
Auchorena.....	225	3.95	Carril.....	166	3.46
Pergamino.....	242	4.06	Cazon.....	182	3.60
Basualdo.....	262	4.19	Saladillo.....	195	3.70
Cano.....	268	4.22	Hernandez.....	99	2.82
Rojas.....	282	4.31	Romero.....	104	2.90
Echeverria.....	301	4.12	Abasto.....	110	2.98
Roca.....	318	4.51	Gomez.....	121	3.00
Junin.....	331	4.57	Brandzen.....	134	3.20
Peña.....	253	4.13	Retéro.....	19	1.80

In this tariff are included all the expenses of discharging at the central produce market of Buenos Ayres, and the grain can remain in deposit for a period of six running days without charge. But these tariff rates apply only to shipments of at least 1,000 kilograms. The main line of the Western Railway now extends out on the pampas as far as Trenque-Lauquen, a distance of 456 kilometers from Buenos Ayres, through a region which is being rapidly settled and which promises to be a good wheat-producing country. This road has several lateral branches, which take in, perhaps, the best wheat-farming region in the Province of Buenos Ayres, all in close proximity to deep-water navigation. The principal terminus of the road is the city of La Plata, the capital of the Province, 30 miles from Buenos Ayres, where there is always water sufficient to float the largest ocean-going craft.

GRAIN TARIFF OF THE SOUTHERN RAILWAY.

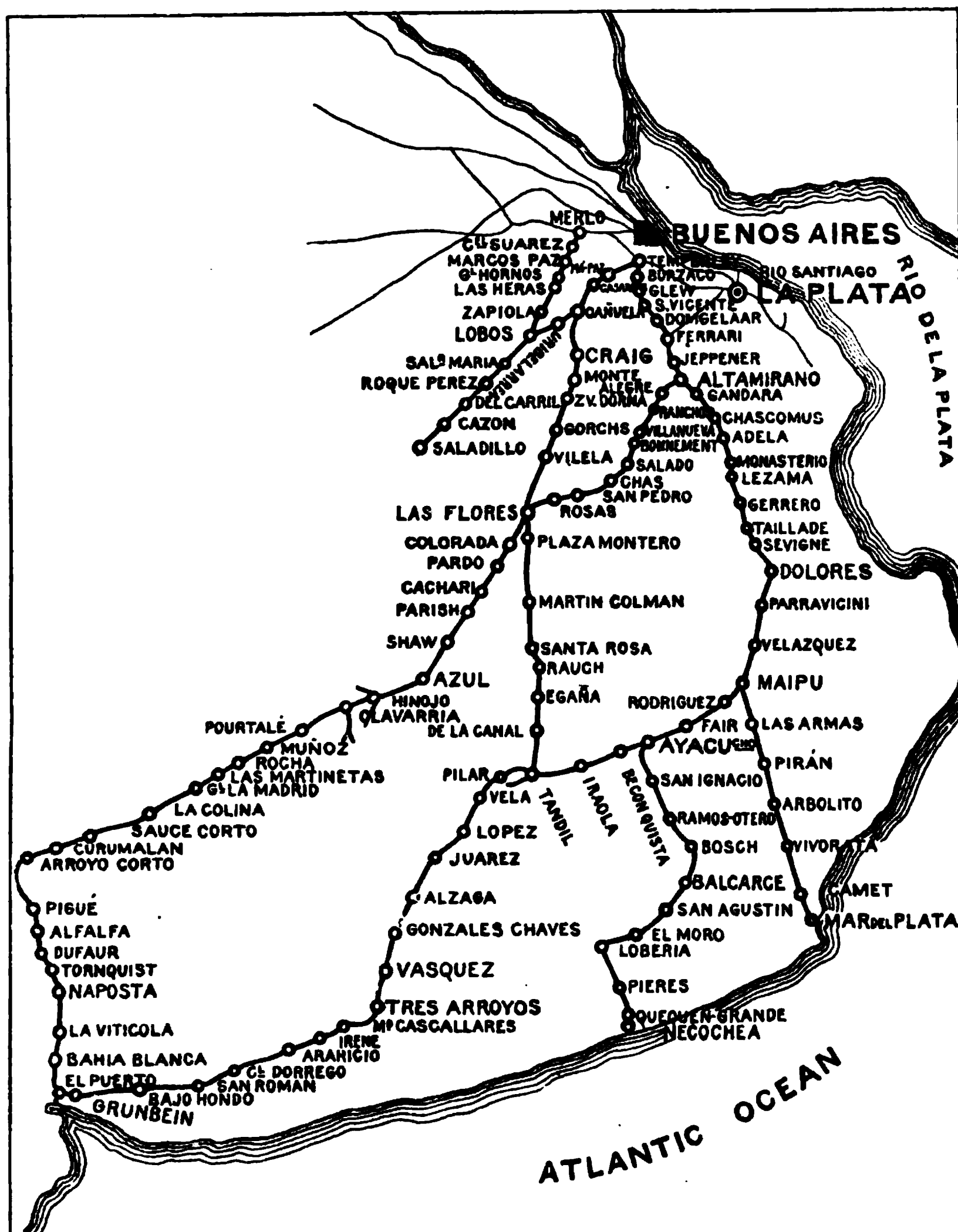
But by far the most important railway in the Province of Buenos Ayres is the Great Southern Road, which, by two distinct routes, passes southeast through the province and terminates at Bahia Blanca, the only natural land-locked port on the entire Atlantic coast. The region it traverses was heretofore the great cotton-growing and sheep-farming pastures of the Argentine Republic; but agriculture is rapidly asserting its supremacy there, driving the cattle industry still further out on the pampas.

The following is the tariff, in gold, on a ton of wheat from each of the

464 TRANSPORTATION OF WHEAT IN ARGENTINE REPUBLIC.

different stations on the two lines of that road to the central markets in South Barracas:

Name of station.	Distance.	Tariff per ton.	Name of station.	Distance.	Tariff per ton.
	<i>Kilometers.</i>			<i>Kilometers.</i>	
Constitucion (city).....		\$1.46	Dolores	204	\$2.91
Barracas.....	4	1.43	Parravicini	223	3.05
Lanus	9	1.41	Velasquez	245	3.23
Baufield.....	13	1.44	Maipu.....	271	3.43
Lomas	15	1.46	Dorrego.....	296	3.62
Temperly.....	17	1.47	Piran.....	318	3.79
Llavallol.....	22	1.51	Arbolito	338	3.95
Monte Grande.....	26	1.54	Vivorata.....	362	4.10
Ezeiza.....	32	1.60	Camet.....	388	4.18
Suarez.....	38	1.64	Mar del Plata.....	399	4.22
Maximo Paz.....	45	1.70	Rodriguez	392	3.59
Vincente Caseres.....	49	1.72	Fair.....	314	3.77
Canuelas.....	64	1.84	Ayacucho	332	3.90
Craig.....	90	2.03	San Ignacio.....	355	4.07
Monte.....	107	2.17	Ramos Otero.....	378	4.15
Dorna	121	2.28	Bosch	394	4.20
Gorchs.....	138	2.40	Balcarce.....	420	4.28
Vilela	158	2.56	San Augustin.....	444	4.36
Las Flores.....	179	2.72	El Moro.....	466	4.43
Plaza Montero.....	194	2.84	Loberia.....	485	4.49
Martin Colman.....	223	3.07	Pierez.	507	4.56
Santa Rosa.....	252	3.28	Necochea.....	527	4.62
Rauch.....	269	3.41	Reconquista	353	4.07
Egana.....	290	3.58	Iraola	375	4.05
De la Canal.....	308	3.72	Alegre.....	103	2.14
Tandil.....	330	3.86	Ranchos.....	112	2.20
Pilar.....	421	4.08	Villanueva.....	132	3.36
Vela.....	440	4.14	Bonnement.....	137	2.40
Lopez.....	460	4.21	Salado.....	143	2.45
Juarez.....	481	4.27	Chas	158	2.56
Alzaga	507	4.36	San Pedro.....	176	2.70
Gonzales Chaves.....	529	4.42	Rosas	192	2.82
Vasquez.....	547	4.48	Colorada	200	2.89
Tres Arroyos.....	572	4.56	Pardo	214	2.99
Cascallares	594	4.63	Cachari.....	233	3.14
Irene	615	4.70	Parish.....	252	3.29
Aparicio.....	633	4.76	Shaw	267	3.40
Las Mostazas.....	671	4.88	Azul	288	3.56
San Roman.....	696	4.96	Hinojo	317	3.79
Bajo Hondo.....	731	5.08	Olavarria.....	332	3.90
Grunbein.....	754	5.15	Pourtallé	361	4.09
Adrogué.....	19	1.49	Muñoz	378	4.15
Buzarco	22	1.51	Rocha.....	398	4.21
Glew	29	1.57	Las Martinetas.....	410	4.26
San Vicente.....	39	1.64	La Madrid.....	428	4.30
Domselaar.....	52	1.74	La Colina.....	453	4.39
Ferrari.....	64	1.84	Sauce Corto.....	490	4.51
Jeppener	77	1.94	Curumalan.....	505	4.57
Atamirano.....	88	2.02	Arroyo Corto.....	524	4.62
Gandara.....	99	2.10	Piqué	538	4.66
Chascomus	114	2.22	Alfalfa.....	558	4.73
Adela	129	2.34	Dufour	579	4.80
Monastario	139	2.41	Tornquist.....	499	4.86
Lezama	152	2.51	Napostá.....	640	4.99
Guerrero.....	163	2.60	La Vitacola.....	653	5.04
Taillade.....	177	2.71	Bahia Blanca.....	680	5.12
Savigné	191	2.81	El Puerto.....		5.24



No. 183—5.

As I have said, the Southern Railway has really two lines between Buenos Ayres and Bahia Blanca, the distance by one of them being 680 kilometers and by the other 770 kilometers. A diagram which accompanies this report shows the routes of the two lines and the country they traverse.

WHAT IS THE AVERAGE RATE?

Having thus given the tariff on a ton of wheat from each one of the stations of both the Western and Southern roads, the next thing is to find the average rate. If the quantities shipped from the different stations were equal, the average would be ascertained by simply dividing the aggregate amount of the rates by the number of stations; but the shipments are not equal, and I have no way of knowing what were the quantities shipped. Besides, the wheat along the two sections of the Southern road does not all come to Buenos Ayres, but a larger portion now goes to Bahia Blanca. Last year, 65,632 tons were shipped to Europe from that port, and the amount will continue to increase. It may be assumed that hereafter the greater portion of the wheat will go in that direction from all stations beyond the half-way distance, thus very materially reducing the actual average in this direction.

Dividing, however, as I have suggested, the sum of the rates by the number of stations, we may approximate to the average. This would give \$2.25 gold as the average rate on a ton of wheat on the Western road, and \$3.30 gold as the average rate on the Southern road, from the station to the port of Buenos Ayres, and the average of these two rates would be \$2.80 gold. This includes all the expense of discharge, with six days' free storage on the Western road and twelve days' free storage on the Southern road.

Mr. Alexander Grant, the manager of the Buenos Ayres Central Market, a gentleman who was formerly officially connected with the Southern road, has kindly handed me a memorandum, which I attach as an appendix to this report, which throws further light on the subject of freight charges. He says that the basis of the grain rate of the Southern Railway is \$0.0103 gold per ton per kilometer, to which is added a terminal charge of \$1.36 gold per ton; and this method of computation quite corresponds to the tariff as given in the foregoing table. He further states, however, that, actually, in collecting freights in depreciated paper money, the full premium on gold is not exacted, but only 75 per cent.

Mr. William Goodwin, "authorized grain inspector of the River Plate," has also not only furnished me with much information on the subject of the transportation of wheat in the Argentine Republic, but he has submitted to me the advance sheets of a book on "Wheat Raising in the River Plate," which is full of interest. Taking the average of the railway carriage of wheat to Rosario and to Buenos Ayres, he estimates the cost of transporting a ton of wheat from the farms, not including warehouse charges, at \$7 per ton Argentine paper currency, equal to about \$2.20 gold. In reference

to the actual working expenses of grain in the port of Buenos Ayres, he says :

The average cost of transporting wheat in bags from the Argentine farmer's carts to the steamer's hold is only about 10 or 15 per cent of its market value at the seaboard.

Thus, assuming that the average price of wheat here in Buenos Ayres is \$25 gold per ton, the cost of the transportation of the same would be from \$2.50 to \$3 gold, or just about the average I have deduced from the tables of tariffs.

One of the chapters of Mr. Goodwin's book is devoted exclusively to the subject of transportation of wheat in the Argentine Republic, which, coming from such an authoritative source, I have deemed of sufficient interest to transcribe and give as an appendix to this report.*

WHEAT DEPOSITS IN BUENOS AYRES.

In regard to the character of the wheat storage at the ports of export, I have to say that there are here no such structures as we call elevators in the United States. The Southern Railway Company has some such building at the "Boca port," but it does not possess the facilities for receiving and delivering grain which are considered so essential in the United States. The wheat deposits are simply warehouses, called here *borracas* or *galpones*, without any mechanical appliances. The railways, at many of their stations in the interior, in order to meet the increasing crops, have built cheap deposits, which have considerable capacity, and both here and at Rosario they have *galpones*, which will store large quantities; but there are no private deposits here except the *Catalinas*, which, owing to its locality away from the present shipping points, is rather inconvenient, but which, if the city docks shall ever be completed, will necessarily find plenty of employment.

BUENOS AYRES CENTRAL PRODUCE MARKET.

The most important structure for the storage of the produce of the country is the Central Market of Buenos Ayres. Indeed, I believe it is one of the largest covered buildings in the world. It is located on the south bank of the Riachulo, a little river which has been dredged and walled with

* I take the following from the London Corn Trade News :

"Mr. William Goodwin, of Buenos Ayres, has a book now in the press dealing with the whole question of wheat raising in Argentina.

"After perusal of the advance sheets, we are in a position to say that the book, when complete, will be found to be of absorbing interest to grain merchants and millers throughout the world. The chapter treating of the qualities and sorts of wheat grown is of especial value. The origin and nature of the following descriptions are described: Cordoba, Entre Rios, Diamante, Barletta, Tusela, French (or Francés), Saldome, Bahia Blanca, Chubut, Uruguay.

"The book is divided into chapters, headed as follows: (1) General Description of the Country, (2) Districts, (3) Wheat Farming in Santa Fé, (4) Land Tenure and Government, (5) Cost of Wheat Growing, (6) Country Dealing, (7) Transportation, (8) Shipping Ports, (9) Other Crops than Wheat, (10) Currency.

"The book is illustrated with full-page photo-zinco blocks, showing some of the different stages of a colonist's life, from the time he settles upon the pampa until he sees the wheat put on board the ocean-going steamer.

"The book will be published at 2s., bound in boards. Orders may be sent to the office of the Corn Trade News, 17 Goree Piazzas, Liverpool; 2 Fenchurch avenue, London; 32 Broadway, New York."

wharfs and forms what is called the "Boca port." The main building consists of nine structures, covering 12 acres of ground, while mole roads, railway approaches, and receiving and discharging platforms cover about as much more. The building is three stories in height. There are 112,000 square meters of flooring, with a storage capacity for 24,000 metric tons, storing only to one-half the height of the respective floors. The roof is built of glass and galvanized iron. There are eight entrances, four for carts and four for railway cars, each of the latter having three lines of rail capable of receiving nearly 300 cars at a time. The hydraulic machinery consists of four compound hydraulic pumping engines, with four tubular boilers and four accumulators, with a pressure of 740 pounds to the square inch. This machinery works sixty-five cranes, besides giving movement to sixteen traversers and fifty capstans. The great advantage which the Central Market offers to produce dealers is that all the produce brought into Buenos Ayres can be concentrated there, thus saving to buyers and sellers alike the time heretofore wasted in hunting up lots of grain in different parts of the city, while by a system of warehouse warrants, or certificates of deposit, the banks will make advances thereon. The immediate management of this market is in charge of Mr. Alexander Grant, assisted by Mr. Denny Stokes, accountant.

CHARGES OF THE CENTRAL MARKET.

The charges of the Central Market have been furnished to me as follows:

For receiving wheat intended for sale by carts or cars, with the right of 6 days' deposit free.....	per 1,000 kilograms...	\$0.90
For receiving over the mole from vessels with the same right.....	do.....	.90
For delivering to carts in bags.....	per 100 kilograms...	.05
For delivering over the mole in bags.....	do.....	.05
For transferring from one part of the deposits to another.....	do.....	.01
For storage per month:		
In bags.....	do.....	.04
In bulk.....	do.....	.08
For weighing and delivering.....	per 1,000 kilograms...	.30
For sacking.....	do.....	.40
For shoveling and assorting.....	do.....	.15
For sewing bags.....	each...	.01
For making bags.....	per hundred...	.30

All these charges are in paper money, worth about 30 cents on the dollar.

CHARGES OF THE CENTRAL ARGENTINE RAILROAD DEPOSITS.

The charges of the deposits of the Central Argentine Railroad Company are as follows:

For receiving from wagons in sacks, passing it through the elevator, weighing and delivering it, with the right of 10 days' deposit free.....	per 100 kilograms...	\$0.15
For receiving from wagons in sacks, passing it through the elevator and depositing it, with the right of 10 days' deposit free.....	per 100 kilograms...	.10
For weighing, sacking, and shipping.....	do.....	.05

For cleaning and reweighing.....	per 100 kilograms...	\$0.10
For storage after the first 10 days for each 10 days or fraction thereof.....	do.....	.02
For ventilating by machinery.....	do.....	.05
For mixing and ventilating.....	do.....	.03
For transferring quantities of 100,000 kilograms and upwards.....	do.....	.01
For transferring quantities less than 100,000 kilograms.....	do.....	.02

These charges are also in paper money, and to be reduced to gold must be decided by the rate of the day, which now ranges from 320 to 340, according to fluctuations:

THE TOTAL AVERAGE.

Putting together the average costs on a ton of wheat from the farm to the hold of the ship, in this port, it would seem that the total expenses per ton, in gold, are about as follows:

Average cost from the farm to the station.....	\$0.70
Average cost from station to port.....	2.80
Average cost of passing through deposits.....	.50
Total expense of transportation.....	4.00

This is a little more than either Mr. Goodwin or Mr. Grant have figured it, but the difference is so small as to give confidence to their estimates.

COMPETITION AMONG BUYERS.

In regard to the competition among buyers, there is hardly so much visible here as there is in the United States. During the wheat season, of course, there is considerable movement among all parties interested, but there are yet no such things known here as combinations, rings, syndicates or trusts, organized for the purpose of controlling the market, making "corners" or monopolizing the trade. Much of the wheat, especially among the small farmers, is really sold by them before the harvest to the storekeepers of the localities nearest the farms for advances of money and supplies while the crop is growing. Agents of European firms are always here in the season, but with them, as also among local dealers and shippers, the price is in great part governed by the daily rates cabled from Europe, and there is not often much room for bold speculation. As the quotations here are in paper currency, of course the daily fluctuations in the money market materially affect the movement in and price of wheat, which is buoyant when there is a rise and depressed when there is a fall.

BANK ACCOMMODATION.

The banks of Buenos Ayres, or elsewhere, are always ready to make advances on the usual terms on warehouse receipts when the grain is in deposit, or on bills of lading when it is on shipboard. They are also prepared to meet all open letters of credit for the purchase of the produce of the country.

Mr. H. D. Woolfe, the correspondent of the New York Herald, who has given the subject some attention, has submitted to me an interesting paper,

made at my suggestion, on the wheat trade of the Argentine Republic in connection with the information requested by the Department, and I give it as another appendix to this report.

E. L. BAKER,
Consul.

BUENOS AYRES, *September 10, 1895.*

APPENDIX NO. 1.

COST OF WHEAT TRANSPORTATION.

CENTRAL PRODUCE MARKET,
Buenos Ayres, September 6, 1895.

E. L. BAKER, Esq., *United States Consul.*

DEAR SIR: You ask me to give you an estimate of the cost of transportation of wheat from the *chacra*, or farm, to the port of export. It is difficult to state the cost exactly, since the carriage by cart and rail is continually changing. The charges depend on the state of the roads and the distance, and whether there is competition or not; and the freights by railway are affected by the value of the paper dollar. I will try, however, to let you have more or less what the charges are at present in the southern portion of the Province of Buenos Ayres.

The cartage from the *chacra* to the railway station, for a distance of about 3 leagues (15 kilometers) costs, just now, 20 cents, paper money, per bag, or, say, \$2.80 paper money per ton. In summer, when the roads are in good condition, this charge is much less.

In regard to the transportation from the station to place of export, the basis of the grain rate of the Southern Railway is \$0.0103 gold per ton per kilometer, to which is added a terminal charge of \$1.36 gold per ton. If we calculate this on the distance between Chascomus for instance, and the mole of that company at the Buenos Ayres "Boca port"—113.605 kilometers—it works out at \$2.50 gold per ton. But, though this is called a gold rate, it really is not such, for the railways do not, any of them, charge the full gold rate, but only a certain percentage of it. For instance, the Southern Railway takes 75 per cent. Thus to their published tariffs they are adding, not 235 per cent, which is the present gold premium, but only 176 per cent, so that the present freight on wheat or maize from Chascomus is, to-day, \$2.53, plus 175 per cent of \$2.53, equal to \$6.95 in paper.

The charge of passing through the elevator to ship's hold is \$1.50 paper.

The foregoing shows that the total charges on a ton of wheat shipped from Chascomus, 113.605 kilometers, are as follows:

	Per ton.
Chacra or farm to railway station.....	\$2.80
Railway charge to elevator.....	6.95
Elevator charge.....	1.50
Total, in paper currency.....	11.25

This reduced to gold at the present rate of exchange is \$3.50 gold per ton from the farm to the hold of the ship.

If there are any other data I can furnish you with, it will afford me much pleasure to do so.

Yours faithfully,

ALEJANDRO GRANT.

APPENDIX NO. 2.

ARGENTINE WHEAT—COST OF TRANSPORTATION.

[A chapter from *Wheat Growing in the Argentine Republic*, by William Goodwin.]

Short railway carriage.—In the small cost of transportation to shipping ports, the Argentine farmer has a great advantage over his competitors in the United States, because of the

short railway haulage to the magnificent waterway that penetrates some 300 miles inland. In ordinary seasons, the country roads are good, and cartage a distance of, possibly 30 miles to the railway station is easy, but if wet weather sets in the roads being innocent of stone become full of water holes, and cartage is heavy work. It is, therefore, advisable to cart in the wheat to the railway stations as soon as possible, and the more so as there are no barns whatever in any part of the country, and farmers are naturally anxious to sell part, at least, of their crop at once, not only to avoid injury by wet weather, but also because they want money to pay for hired labor, thrashing, and bags, and very soon after harvest must clear up accounts at the general store and pay installments on machinery and land; so there is an early rush to get the wheat to the railway stations.

Marketing the crop.—Then begins the cry for railway wagons, that for six months at least makes the lot of a traffic manager not a happy one. The farmer has probably sold part of his wheat delivered at the station, and the local dealer has sold it again to merchants to be sampled, weighed, and received for quality on the somewhat uncertain description, "fair average of the crop, sound, dry, and clean," and the work of selection that follows has to be done at the stations, with poor accommodation, for it is quite impossible for railway companies to build warehouses for all the crop, and even if warehouses were built the Italians would grudge the payment of the most trifling sum for storage. When wheat arrives at the railway stations, the time of worry commences for all concerned, but the struggle to get hold of wagons and of men to load them is sweetened to the country dealer by the dodges he can work to pass off to the merchant's receiver bad wheat out of the pile of bags he has gathered from many farms. There are about two hundred and fifty stations at which a merchant may have to receive wheat, and the men sent up for the work need to be very smart and very honest, and, naturally, as the supply of such men is not large a great deal of badly received wheat arrives in Rosario, to the disappointment of the merchant who has ships waiting for cargo. It is therefore necessary to revise all grain in Rosario during shipment and set aside the bad bags, to the delay of work and the annoyance of railway people.

Grain sheds.—The five railways running into Rosario have about thirty loading berths, and, in a busy season, sixty, and sometimes even one hundred steamers and sailing vessels are waiting to load, and consequently there is great difficulty in getting berths where grain can be loaded. In February, 1895, there were one hundred and forty-five steamers and sailing vessels in Rosario either chartered or seeking freights. The railway termini are provided with some covered warehouses, but a considerable portion of the grain in bags has to be piled on open ground and protected with sheets. The entire available space on the river bank will scarcely hold 150,000 tons, and is very much taken up with small piles of "rejections," so that it is quite impossible to have a stock of wheat ready for all the vessels, and a merchant has generally to work very skillfully in order to move his vessel about to the various loading berths where he can get some of the wheat arriving from the country stations. When lay days run out and demurrage begins, the appeals for wagons are desperate, and a traffic manager may be induced to run an extra special train to pick up the wagons at the various stations, but it is exceedingly difficult to decide who is to be favored in this way when everyone is crying out.

There are two obvious policies open to a traffic manager. He may collect cargo ready for steamer due to arrive, or he may wait until the steamer is actually in the berth before bringing the cargo down. These simple policies are affected by many side issues. Every small dealer in the country begs with impassioned action and urgent telegrams for wagons to bring down his wheat so that he may turn it into cash, complains of unfairness to small men, and writes letters to the newspapers and the Government complaining of the railway shortcomings. Merchants and dealers all ask for more wagons than they can load upcountry, and at one station there may be wagons waiting for men, receivers or wheat, and at other stations wheat, receivers, and men waiting for wagons. From every point come howls of grumbling and wonderfully ingenuous statements of bad treatment, but when the most flagrant misstatements of facts are proved to be wrong, it does not say much about the false representations,

because South American *dignidad de hombre* must be respected; although "Truthful James" would have no chance with the average grain dealer "in ways that are vain and tricks that are deep," when he wants wagons. People at home may think that rules can be arranged to simplify matters, but it is difficult to systematize work of this description, and the difficulties can only be dealt with as they arise, because every year there is a different set of traders in each district, who are mostly as clever and active as traders can be.

Grain handling.—The difficulty of knowing which will be the best central point for buying when, every year, the conditions or quality differ in a locality, deters merchants from building their own grain stores upcountry, and checks private enterprise in providing accommodation, and the trade, as at present conducted, is most imperfectly equipped for handling grain to advantage, but a change is sure to come soon, and in due course large dealers will supply themselves with proper granaries or elevators for receiving and classifying wheat at all stations of importance. But meanwhile, the result in Rosario is bewildering to railway men who have their yards at times full of unclaimed wagons of wheat belonging to dealers waiting a market, or shippers waiting for vessels, although at the same time other shippers are crying out for stuff. One railway company last year had for some weeks eleven hundred loaded wagons containing 20,000 tons of wheat, some of which could not be unloaded for various reasons, and the rest could not be extricated from the blocked-up sidings. The fact is, the terminal facilities are very deficient, and Rosario is like the neck of a bottle.

The rolling stock of the two leading railways is ample for moving the crop at reasonable speed, but partly from want of space, and very much from an inconvenient arrangement of the yards that has resulted from the awkward shape of the companies' lands, there is great trouble in bringing the wagons to the ships.

In earlier days, when there were few merchants, and when wheat was all received upcountry and shipped as it came, there was little difficulty, although the result was the arrival of many bad cargoes in Europe. Now, however, greater care is taken in the shipment, and wheat is revised at Rosario to eliminate as far as possible the bad wheat loaded intentionally or otherwise on wagons upcountry, and also the bags that get damaged sometimes on the way down in open unsheeted wagons. Also, an increasing proportion of the crop is sold by upcountry dealers to be received for quality in Rosario, and as every day the number of dealers and shippers increases, the difficulties of handling a great volume of stuff increase fast.

Railway rates.—There is considerable competition among the railways in Santa Fé, and the rates charged are not much higher than in the United States, but in any case, railway freight is a very small proportion of the cost of the wheat exported, because the average distance from station to seaboard is about 100 miles, as compared with at least 1,000 miles in the United States.

Ocean freights.—Ocean freights are naturally affected by the condition of the import trade, and it is fortunate for wheat growers that there is no coal in the Argentine Republic, and that there will always be a large importation of coal for railway and manufacturing purposes. The average earnings of a steamer trading regularly from Rosario to Liverpool or Antwerp during 1893-94 were about 4s. per quarter, and even allowing for the higher rates during the busy season, probably the normal rate in the present depressed state of the freight market is very little higher.

Bags.—Many complaints are made at home about the bad quality of the bags used for the shipment of wheat, and with reason, because during the discharge of cargoes, 15 to 25 per cent of the grain is loose in the hold of vessels, thus in a great measure doing away with the safeguard of using bags to prevent heating on the voyage, without giving the advantage of the thorough mixing and freer passage of air that results if the cargo is loaded in bulk. As long as the custom of selling "bags as wheat" and weighing gross continues, there will be no improvement in quality of bags, and the farmer will buy the very cheapest and necessarily poorest bags that can be supposed to hold together as far as the railway station.

Lighterage.—Unless the river is unusually high early in the season, probably 40 per cent of the wheat shipped is sent down the river in lighters and loaded at Buenos Ayres or La

Plata, and loss in weight and deficient outturn is a very natural result of transshipment, because canvas slings are very rarely used, and a rope sling cuts the poor, thin bags. This, however, is not the only cause of leakage, and it is well known that robberies in transit are frequent, and are easily effected when lighters are anchored for the night in any quiet channel of the Paraná, or even in the odd corners of the Boca del Riachuels of Buenos Ayres. Bags can be bled without spoiling the count, and it is scarcely possible to reweigh and to load at the speed required by the steamers. The cure of this will come by the employment of large lighters carrying all their cargo stowed under the hatches, and by the payment of a sufficient freight to allow the owners of lighters to pay good wages to lightermen, but as long as small, poorly found, and badly paid craft are employed and have their decks lumbered with cargo, no improvement can be fairly expected, and the lightermen will continue to make up for poor pay in the best way they can. River police do not exist, and owing to the want of supervision the system of lighterage generally is such a scandal that heavy deficiencies in the outturns of cargoes in Europe are quite natural, unless the cargo is weighed directly into vessels.

APPENDIX NO. 3.

WHEAT TRADE AND TRANSPORTATION IN THE ARGENTINE REPUBLIC.

Buenos Ayres, *August 27, 1895.*

MR. E. L. BAKER, *United States Consul.*

DEAR SIR: I send you herewith the data that I have been able to gather in reference to the questions of Congressman Harter.

Question 1.—Character and cost of transportation from the farm to the ports of export?

The growers of wheat or other grain carry their products to the nearest point of shipment, be it railroad station or wharf, in their own wagons, the wheat being bagged on the ground as it runs from the thrashing machine, and in no wise graded or cleaned as with farmers in the United States. The wagons or carts are either owned or hired, and to arrive at a correct cost of the expenses entailed would be impossible. From the best sources I learn that the expense may be set at from 40 to 60 cents (paper) per 100 quintals.

Question 2.—Character and cost of elevators, warehouses, or other modes of storage for wheat at the ports of export?

The chief port of export is now Rosario. At Buenos Ayres, there exist several warehouses for the reception of wheat and other grain. The principal of these are the Central Market the "Once de Septiembre," and the "Catalinas" (warehouses). There is a kind of elevator in Buenos Ayres, but it is so badly situated that it is almost useless. Its operations, as carried on by similar machinery in the United States, are almost nil. Its location is such as to preclude its usefulness. The various railroads have at some of their stations small depots suitable to meet the traffic at the points where the wheat is grown.

Question 3.—Competition among buyers, warehousemen, and exporters at the points of shipment?

The bulk of the wheat grown in the Argentine Republic is contracted for before the crop is harvested, unless the grower is a wealthy man. The large shipping houses in Buenos Ayres, with branches at Rosario, maintain at the various points where wheat is grown, and at the colonies, agents who keep stores where the farmers draw their supplies, and during the year these agents advance to the farmers supplies of all kinds, including money to pay their labor. The farmers and growers, on their part, agree to deliver their wheat to these agents in payment of their debts. The price paid is generally that ruling at Buenos Ayres or Rosario on the day of delivery, minus a sum agreed upon as interest or commission on the advances. Competition is very keen among the agents of these firms, those offering the best terms getting the major part of the crops. The price paid for wheat is absolutely ruled by that prevailing in the European markets, the shippers and dealers here receiving almost hourly

data from these markets by cable. There is but little competition for the wheat among exporters, the only operation of that kind being when milling men enter the market to supply their wants for home and Brazilian exports. As no clique of warehousemen exists here, they do not enter the field of buyers. Brokers receive such commission from buyers and sellers as may be agreed upon, rates not exceeding one per cent. There is no such institution as a grain exchange, or any place where grain is bought on speculation. Buyers and brokers attend the early morning openings of the market at the Central and Once de Septiembre markets and railroad stations to see what the receipts are for the past twenty-four hours and the visible supplies, and base their daily dealings on these data, and from reports received from the localities where their agencies are situated. There are not more than a dozen firms of importance engaged in the export of wheat on any large scale, and no such spirit is rampant for speculation as exists in the United States.

Appended is a *pro forma* invoice of a shipment of wheat, which exhibits the cost when the gold rate was at 270 premium. It must, however, be noted that, as the gold premium advances or falls, so the prices and the cost of all kinds change. And herein lies the difficulty of arriving at any accurate cost of either production or profit in this Republic. The railroad freights on wheat and other grain are all that the goods will bear, the companies having the right to fix their rates until their lines pay a certain rate of dividend, beyond which the Government can not interfere. From a careful comparison of the tariff rates of the different roads, I find that the average rate for transport of wheat to Buenos Ayres per carload per 1,000 kilograms ranges from 6.32 to 3.4 cents per kilogram. Taking the cost of a ton of wheat, transport, storage, labor, and all the charges put on board, gives a total of \$57.23. With an average selling price of \$80 per ton, this would leave a profit of \$22.77 per ton over the cost, or about 38.91 per cent. Deducting the profits of the exporter and the charges he has to pay, the profit to the farmer will average about 15 per cent. The railroad tariff is, in case there should be a heavy fall in wheat in the markets for the Argentine product, very high in proportion to the long and short haul. It has been estimated that if wheat falls to a price lower than \$75 per ton, it will not pay to ship from the farm if the distance be more than 350 kilometers, while if maize falls to \$55, in lieu of the estimated lowest figure of \$60, it could not be carried more than 250 kilometers.

In this information, the money values are all figured in the paper currency of the Republic, and as the gold rate varies daily and even hourly, no reliable basis can ever be arrived at either of cost of production or profits.

Banking accommodations.—The English, German, and Italian banks advance moneys on wheat shipment under open letters of credits from the head offices of the wheat buyers in Europe, charging rates of interest and granting credits with at least 40 to 50 per cent margin to even the best firms.

Freights.—The cost of water carriage by steam lighters, barges in tow and sailing craft to and from Rosario and other points on the rivers to Buenos Ayres alongside the exporting ship averages from \$3 to \$5 per ton of 1,000 kilograms. But as this may seem high in comparison with the railroad rates, it must be borne in mind that the wheat, when brought by railroad cars, has to be carried from the cars to the ship, and in some cases lightered, while in the vessels carrying the grain they come alongside the export craft, and the bags are hauled up by the steam winches of the big craft.

The average rate of freights to Europe, since the opening of the season, may be said to range from 22s. to 16s. per ton, including in this estimate both steam and sailing vessels. In this connection, it may be said that owing to the big supply of tonnage, the River Plate wheat market will always have the advantage in low freights over any port of the United States. Steamers of all nationalities and tonnage will bring to this market cargoes of coal at as low a rate as 15s. to 12s. per ton from English ports, and the rates for general cargo from Europe vary from 15s. to 24s. or 25s. for fine goods, and these rates are taken to obtain homeward freights at the figures quoted above, or slightly better if live cattle or frozen meat are carried back.

Specimen account current, purchase of 100 quintals of wheat from a farm in the Province of Santa Fé, Argentine Republic.

100 quintals of wheat, at \$4 per 100 kilograms, bagged at the farm.....	\$400.00
Cartage to railroad station, 40 cents per 100 kilograms.....	40.00
Railroad freight to Buenos A , at \$1.50 per quintal.....	150.00
Labor loading from cars to lighters, at 5 cents per quintal.....	5.00
Lighterage from railroad to ship, per 100 quintals.....	100.00

Total cost from farm to board ship..... *695.00

Francs.

\$614 (paper) at exchange \$5.05, with gold premium $270=1.37$ francs per dollar...	841.20
Freight to France, $17\frac{1}{2}$ francs per 100 quintals.....	175.00
Insurance, three-fourths of one per cent on 1,800 francs.....	7.50
Brokerage in Europe, one per cent.....	10.00

Total..... 1,033.70

Showing cost, freight, and insurance for 100 kilograms of wheat, 10.33 francs. At 20 cents United States gold per franc, this gives $2\frac{1}{3}$ cents per kilogram of 2.2 pounds, or 57.24 cents United States gold per bushel.

HENRY D. WOOLFE.

BUENOS AYRES, *September 6, 1895.*

TRANSPORTATION OF WHEAT IN THE PROVINCE OF SANTA FÉ.

I have received the instruction of the Department of State to report in reference to the cost of transporting wheat raised in the district of this consulate, from the farms to the port of export, together with the incidental expenses of storage, etc.; as, also, of the character of the storage and of the competition among the buyers and exporters.

TRANSPORTATION.

Of course, this depends, in the first place, on the distance of the farms from the railway station, and, in the second place, on the distance of the station from the shipping port. When the roads are in ordinary condition, it is considered that the charge for cartage will be about \$1, paper currency—say 35 cents, gold, per ton per league. Assume that the average distance is 3 leagues from a station, and we have \$1.05 gold for cartage.

The transportation from the station to Rosario, it would seem, can only be reached by way of average, since the tariff rates on the different lines of railway are not only not uniform, but are graded according to the distance the grain has to be brought. Let us take, however, an area distant about 100 kilometers from Rosario, which would represent the bulk of the wheat production of the provinces of Santa Fé, and the cost of transportation may be placed at about \$5, paper currency, per ton of 1,000 kilograms, which, at 340 per cent as the value of the gold dollar, would be \$1.47 gold. This rate per 100 kilometers would be at $1.6093=\$2.37$ gold per ton per 100 miles.

I have received from Mr. Arthur H. Baines, the traffic manager of the Central Argentine Railway, the following table of the rates, in paper currency, per ton of wheat transportation on that line according to the distance of the station from Rosario:

Distance.	Tariff.	Distance.	Tariff.	Distance.	Tariff.	Distance.	Tariff.
<i>Kilometers.</i>		<i>Kilometers.</i>		<i>Kilometers.</i>		<i>Kilometers.</i>	
10	\$2.00	51	\$3.00	186	\$7.80	254	\$8.60
16	2.20	66	3.20	196	4.70	271	9.20
26	2.50	104	3.50	116	5.20	288	9.60
37	2.80	121	4.40	134	5.60	305	10.20
49	3.10	107	4.70	150	6.40	323	10.80
59	3.40	93	4.30	167	6.90	342	11.20
72	3.80	78	3.80	186	7.30	355	11.60
92	4.70	84	4.10	201	7.70	359	11.80
103	5.30	94	4.50	196	8.00	370	12.00
122	5.60	106	5.00	210	8.10	387	12.00
140	6.30	123	5.40	225	8.30	7	1.00
30	2.50	159	7.00	238	8.50	17	1.10
43	2.80	176	7.60				

Mr. Baines states that the anomaly presented above in the comparative rates for distances, is due to the sliding scale of the premium, and to the points of competition with other railway companies passing through the same localities.

By dividing the sum of the rates in the above table by the number of stations, it appears that the average tariff on wheat is \$6.02, paper currency, per ton, per station, equal to about \$1.77 gold. If we divide the sum of the rates by the total number of kilometers, the average will amount to about 4 cents, paper currency, per ton, per kilometer, equal to about 01.11 cents in gold.

I understand that the wheat tariff of the Argentine Central Railway quite corresponds to the tariffs of the other railways centering here.

STORAGE.

The rates for storage, elevator, shipping, etc., charged by the deposits of the Central Argentine Railway and by the Mercantile Graneros Company, of this city, are as follows:

For receiving from the wagons in sacks, passing through the elevator, weighing and shipping (or delivery to wagons) in sacks, with a free deposit of ten days, per 100 kilograms.....	\$0.15
For receiving from the wagons in sacks, passing through the elevator, weighing, and depositing, with a free deposit of ten days.....per 100 kilograms..	.10
For cleaning and weighing.....do.....	.05
For ventilating by machinery.....do.....	.05
For mixing and ventilating.....do.....	.03
For transferring from one bin to another.....do.....	.01 ½
For weighing lots in deposits, or on small scales.....do.....	.03
For storage after the first ten days for each ten days or fraction.....do.....	.02
For transferring in quantities of 100,000 kilograms and over.....do.....	.01
For transferring in less quantities.....do.....	.02

All these charges are in paper currency, which is equal to about 33 cents gold to the dollar.

SHIPPING CHARGES.

The cost of shipping from railway company to deposit, and thence on board, is \$1.10 per ton, paper currency, equal to 32 cents gold. If shipped direct from the car on board, the cost is 80 cents per ton, paper currency, equal to about 23 cents gold.

COMPETITION AMONG BUYERS.

The competition among buyers and grain dealers is very keen during the season, and long contracts are made for deliveries in Rosario and for export. It may be said that quite all the crop in this province is exported, complaint frequently being made as to the possible shortage of the home supply.

WILLIS E. BAKER,
Consul.

ROSARIO, *September 30, 1895.*

GRAIN CROPS IN THE ARGENTINE REPUBLIC.

On account of the general interest taken in the probabilities regarding the coming wheat and the past corn harvest in this Republic, I have thought best to transmit to you briefly the result of my inquiries and efforts to reach some approximately reasonable conclusions on the subject.

The general consensus of opinion as to the wheat acreage for next year in this Province (Buenos Ayres) would indicate a reduction of about 15 per cent as compared with last year, owing largely to the fact that the corn crop interfered with planting, while in the Province of Santa Fé the acreage will be more or less the same. Locusts have made their appearance in large numbers in parts of the latter province, and fears are entertained that the wheat will suffer very much this year from their ravages.

The indications are that the amount of wheat for export next year will be moderate and not in excess of the exports for this year.

The corn crop, which is now being shipped abroad, was large, but, from various causes, the quantity suitable for export is greatly below that expected. Among other causes, the mild winter has been the most important, as it has made it impossible to properly cure the crop so that it would stand exporting.

The maize market is very dull, and large quantities are on hand in the interior. It will be found impossible to cure the large portion remaining by artificial methods and sell it, except at a loss, at present and prospective prices. For this reason, it is to be expected that greater attention will be given than has heretofore been done to the use of corn in fattening cattle for export. This latter industry will, I am sure, as I have said in previous dispatches, continue to increase.

No reliable data is yet at hand as to the quantity of corn produced in the last harvest. There have been, however, 393,000 tons exported up to August 30.

WILLIAM I. BUCHANAN,
Minister.

BUENOS AYRES, *September 7, 1895.*

MARTINIQUE: BUSINESS DEPRESSION, RESOURCES, ETC.

Since taking charge of this consulate on May 29 last, I have endeavored to obtain a clear insight into the commercial affairs of this island in order to account for the depression in trade now existing. To this end, I have conversed freely with merchants, bankers, and the president of the chamber of commerce, as well as with the governor of the island. I have thus gathered considerable data, which I deem it my duty to communicate to the Department.

During my sojourn in Washington in April last, I became aware of the fact that there is but little information regarding Martinique to be found among the correspondence in the archives of the Department, hence it becomes necessary to make this report exhaustive, which explains its volume.

Martinique is one of the most fertile islands in the world; it possesses a variety of soils—volcanic, calcareous, and tufaceous. Its climate, although at times oppressively warm, is, on the whole, agreeable, or at least supportable, and favorable to the cultivation of every species of tropical products. It is situated in latitude $14^{\circ} 23' 20''$, longitude $63^{\circ} 6' 19''$. It is 80 kilometers long by 31 kilometers wide and 350 kilometers in circumference. The area of the island is 98,782 hectares, or 244,100 acres, of which 42,000 hectares are cultivated—40,000 hectares in sugar cane, 1,500 hectares in cacao, 50 hectares in tobacco, 25 hectares in indigo, and 170 hectares in other products. The highest mountain is Pelée, 1,350 meters (4,427 feet). The island is divided into thirty-two communes, nine cantons, and two arrondissements, viz, Fort de France and St. Pierre. The former, the capital and seat of government, has large Government docks, a fine landlocked harbor, and high court of justice and appeals. It is the headquarters for the French line of steamers, the Compagnie Générale Transatlantique, and has 12,000 inhabitants.

Martinique has 190,000 inhabitants. The name of the present governor is Noël Pardon.

St. Pierre, the chief commercial town, has 30,000 inhabitants, and is an open roadstead. The steamers of the Royal Mail Steam Packet Company of London touch here twice a month, as well as the steamers of the Compagnie Générale Transatlantique and the Quebec Steamship Company's ships from New York. St. Pierre is a cathedral town and the see of a bishop. There are two banks, one local, called the Bank of Martinique (Mr. Le Boucher, manager), with a capital of 3,000,000 francs, and a branch of the

Colonial Bank of London (Mr. G. O. Gyllich, manager), with a capital of £2,000,000. The Colonial Bank has branches throughout the West Indies and in Wall street, New York.

No produce is exported to the United States, all going to France, and consisting chiefly of sugar and rum.

Flour, lumber, and provisions generally are imported from the United States. Exchange rules very high, and is hardly obtainable at 12 per cent premium. For the past five years, the value of imports and exports has been as follows:

Year.	Imports.	Exports.
1890.....	£1,200,000	£926,000
1891	1,335,000	910,000
1892.....	1,313,000	729,009
1893.....	1,018,139	954,000
1894.....	1,155,726	893,000

Martinique was definitively settled in 1636. From that year to 1738, white immigrants were introduced, under a three-years' indenture, from Dieppe, Havre, and St. Malo. Thereafter, only African slaves (who had for seventy-five years been introduced in limited numbers) were imported. This extension of slave immigration may be said to be coeval with the establishing of sugar-cane growing. The early inhabitants confined themselves exclusively to the cultivation of tobacco and cotton, subsequently adding indigo and cacao as offering remunerative inducements. The importation of sugar cane by the Dutch, who had been driven from Brazil, commenced in 1654, and the cultivation of this plant, readily adopted by the inhabitants of all the Antilles, being found to be in harmony with the tastes and interests of planters and facilitated by the African element, who could better resist the tropical heat and the labors of the cane fields, became general and extensive. Cacao plantations were, after fruitless attempts in 1660, successfully undertaken in 1684. Coffee trees soon followed, and in years afterwards had gained a reputation for flavor and aroma which lasts to this day, the "Café de la Martinique" being still sold at the fashionable centers in France, although, as a matter of fact, there were only 3 tons, equal to 6,614 pounds, sent to France during 1894, and the importation of coffee, to meet the local wants, has been for many years one of the principal branches of trade. This phase of Martinique industry, after flourishing and giving good results, coffee plantations being numerous, gradually declined, owing to a disease attacking the trees and the all-absorbing interest in cane growing. Fruits, such as bananas, oranges, pineapples, etc., although more abundant previous to the cyclone of 1891, when 500,000 trees are estimated as having been destroyed, have never been planted on a sufficient scale to meet outside wants, thus preventing the planters from availing themselves of the proposal of the Star Flour Mills Company of Galveston, Tex., to supply their brands of flour in exchange for fruits and liquors of

various kinds. It is to be regretted that no well-concerted and general efforts have been put forth to increase the acreage of these products. On the contrary, since 1891 increased efforts have been directed to the cultivation of sugar cane, to the neglect, correspondingly, of other products. The result has been an aggravation of the present sugar and financial crisis, for, if there had been, as at Trinidad and Jamaica, for instance, fruits, cacao, coffee, etc., in sufficient quantities raised to compensate, if only partially, for the ruinously low price of sugar and a deficit in the sugar crop owing to the severe drought of 1894, the situation would have been far better than it is at present. The system of concentrating all the capital of the island and that of the lenders of France in cane planting has been a great mistake, as was recently pointed out by certain colonial deputies in a bill presented by them to the Chamber for discussion. This bill had for its object the entire exemption from import duty into France of cacao, coffee, vanilla, etc., as an encouragement to the extensive planting of the products named, even if such extension be accompanied by a corresponding diminution of cane acreage. The crisis through which this island is passing has been considerably accentuated by the promulgation in the colony of the general French tariff, which became a law in France on January 11, 1892, and was, shortly afterwards, promulgated in Martinique. The mother country, at the suggestion of the local assembly and Chamber of Commerce of Martinique, consented to modifications of this law in favor of certain food stuffs and rough pine woods (white, pitch pine, etc.), which are indispensable and can not, except at high prices, be received from France, and of which all, or nearly all, is imported from the United States. All other items, of whatever nature, including salt, pickled and smoked fish, manufactured goods, hardware, etc., were placed under a prohibitory duty. The new tariff comprises two classifications—maximum and minimum rates. Those nations who have treaties of commerce with France, on the principle of the most-favored-nation clause, are (or their goods, rather), treated under the minimum category; other nations, with which there are no such conventions, are treated under the maximum rates. Among the latter, I am surprised to see the United States. With the exception of the special regulation respecting food stuffs, etc., as before stated, every other article pays, when coming from the United States, the maximum duty. Even taking the minimum rates of the tariff the duty, when compared with the low municipal or local duty (called here *droits d'octroi*) that are put on French goods, the margin still remains detrimental to foreign trade, resulting in the increased price of every item. This weighs heavily on a community, the purchasing power of which has woefully declined since the sugar crisis.

It is easy to foresee that another such year as that through which not only Martinique but all the West India Islands that are dependent practically upon one product as a staple of export are passing, will result in disaster. It is impossible, with the present low prices of sugar, to make any profits; indeed, losses are more the rule than the exception. With the teeming

population, if better prospects be not in store, no one can tell when the crash may come. In Barbados, British Guiana, Antigua, and St. Kitts, similar conditions exist, as I am credibly informed. There is, however, a silver lining to the cloud. The reduction in the acreage of sugar beets, the condition of the island of Cuba, and the revival of trade in various quarters, notably in the United States, thereby increasing the purchasing power of those communities and augmenting the consumption of sugar, seem to encourage the hope of better prices for the yield of 1896. Added to this, the indications of more favorable weather prevailing during this season than that of 1894 are somewhat encouraging to the unfortunate sugar planters. My information regarding the troublous times in store for the British possessions in the West Indies, is accentuated by the following extract from the Jamaica Post, in its issue of May 14, 1895:

Jamaica has its own difficulties to face and its own problems to solve. But of one thing we ought to be thankful—we do not depend wholly on sugar and rum; and if those staples were to go to the wall to-morrow, we should still be able to get along somehow. At the same time the lesson which our own past experience, as well as the unhappy lot of other West India islands teaches with utmost clearness, should not be lost sight of by our settlers and agriculturists. More attention should be paid to what are commonly called the minor products; just as sugar has had its day, so bananas may fail us before long, and even coffee may prove to be an unprofitable crop. But there will always be a demand for oranges, pineapples, citrons, and other superior tropical fruits in the northern markets of Canada and the United States; and there is no reason why the very finest vegetables should not be cultivated here in large quantities for winter consumption in these populous countries. One thing, at all events, is certain, the more numerous the export products are, the less likely are we to pass through the terrible times of depression which seem about to overwhelm the neighboring colonies.

Martinique can do fully as well as Jamaica has already done, and as the Post advises it still further to do. If the prohibitory duties be modified, it would encourage the planters, merchants, and gardeners, and a large and profitable trade with the United States would be sure to follow. Capital is the great desideratum here at present, and if our manufacturers would send out their own trusted agents to look carefully into the possibilities of this fertile island, I feel satisfied that companies could be easily formed, as in Jamaica and other islands, to engage in the raising of bananas, pineapples, oranges, and other fruits upon a large scale, which always find a ready market in the United States, and at the same time supply these islands with flour and other breadstuffs in exchange, thus realizing a double profit.

JULIUS G. TUCKER,

MARTINIQUE, *July 18, 1895.*

Consul.

BANKING IN MARTINIQUE—FINANCIAL DIFFICULTIES.

I have the honor to report that, being desirous to account for the stagnation in trade and the corresponding scarcity of money, especially gold and silver coin, in this island, I made diligent inquiries in various quarters,

and am now in possession of data which enable me to make a statement to the Department. Attributing the stagnation in the first instance to the fact that the Bank of Martinique, as well as the Colonial Bank of London, have refused to sell drafts for some time, thereby making it almost impossible for merchants to make remittances, I directed my inquiries especially in that quarter, and find the following to be the present situation: In my report of July 18, 1895, I gave the exports and imports in pounds sterling, but now I revise these figures, giving the exact situation taken from the official statistics of the island in the national money values.

The Bank of Martinique was created by the law of July 11, 1851, the capital being 3,000,000 francs (\$579,000), and in virtue of the law of April 30, 1849, whereby an eighth of the indemnity accorded to the colony on the emancipation of its slaves was set apart to form the said capital.

The decrees of December 22, 1851, and November 17, 1852, put this establishment in operation and appointed a central agency at Paris of the colonial banks (those of Guadeloupe, Cayenne, and Réunion). This decree was somewhat modified by that of March 30, 1874. The Bank of Guadeloupe and those of Cayenne and Réunion were, at about the same time, similarly constituted. The statutes annexed to the law of 1851, fixed the duration and privileges of the bank at twenty years; that of June 24, 1874, prolonged its existence for another twenty years, and recently it was extended again for a term of twenty years. It transacts the business common to banks in general, such as holding deposits, discounting commercial paper, and other matters. One peculiarity, however, distinguishes it from similar institutions—that of being essentially agricultural in one of its principal transactions. I may add that it partakes of the nature of a government institution, its directory being appointed by the Government. The director (or president) is aided in the administration of the affairs of the bank by an administration council composed of the national treasurer at St. Pierre, who is supposed to represent the chief treasurer at Fort de France, and three inhabitants, generally merchants. These are assisted by two censors who are also private individuals. Every morning these gentlemen meet at the bank to supervise its affairs and decide any question that may arise respecting the general administration of the establishment.

According to its statutes, it advances money on the yearly sugar crops, the loans commencing in July on the crop following in December and January and succeeding months, this being the main object for which the bank was brought into existence by the Government—that is, as an aid to agriculture after the emancipation of the negroes. It issues drafts only on the agents of the Colonial Bank at Paris (the Comptoir d'Escompte National), being in reality the drawers and honorers of said drafts, the amounts whereof by it being put to the debit of the bank, in account current, bearing interest.

From the foregoing, it will be seen that the liability of the agricultural interests and the bank's indebtedness to the Comptoir d'Escompte National

are two very important points, the former to be reimbursed to the bank, the latter to be paid by it to its Paris creditor. The payment by the planters of advances, as mentioned, is effected either in cash or by drafts on their consignees in France, on the strength of sugar shipments or consignments. Of late years, since 1891 especially, the planters being subsequently thereto more dependent on the bank than they had been, the bank has taken drafts in its favor from the planters and manufacturers, not only as a means of remitting to the Comptoir d'Escompte against drafts drawn and sold by it, but, also, as a means of liquidation of the debt at any given time of the planter or manufacturer. The privileges of the bank on the sugar crop, until its advances are reimbursed, are very strong, overriding all statute laws or previous indebtedness to any other party; but, at the same time, this privilege is limited to the pending crop on which such advances are made. If, at the termination of the crop and its entire shipment a balance is due the bank, such balance becomes an ordinary and concurrent debt. To prevent loss from this fact, if the bank is still creditor after (for instance) a planter has finished his crop, and has been unable to pay his indebtedness, it has been the custom, in order to preserve the special privilege before stated, to oblige the debtor to renew for another season his liability, as if it were a new debt under the special privilege. If a planter, to illustrate the case, owes a balance of 10,000 francs (\$1,930) at the end of a crop, and he wants 50,000 francs (\$9,650), the bank advances, in reality, but 40,000 francs and gets acknowledgment for 50,000 francs, which stands privileged as regards the exclusive right of the bank to the pending crop. It will be seen, therefore, how essential it is that the agricultural class should pay the bank, and how equally important it is that the bank should be in a position, punctually, to liquidate its debt to the Comptoir d'Escompte National.

When both of these points are hampered or unaccomplished in their entirety, if large balances are due to the bank by cane growers or sugar manufacturers after the realization of a crop, and if, by reason of failure or reduction of crops or low prices, the bank can not fulfill its engagements to its Paris creditor—even enfeebling its action in respect of continued pecuniary help to the cane industry—the general embarrassment which inevitably ensues is keenly felt.

The liability of the Bank of Martinique to June 30, 1895, to the Comptoir d'Escompte National for drafts accepted by the latter, was 4,858,349.78 francs (\$937,661.50). To this indebtedness must be added 1,000,000 francs (\$193,000) to be used in drafts by it in favor of the British Colonial Bank to redeem the notes of the former held by the latter, thus making a total of 5,858,349.78 francs (\$1,130,661.50). From now to the next crop this debt must increase, without any compensating or corresponding remittance from the bank, from the entire absence, during the interval, of colonial produce, or staple of exportation; hence, the necessity of limiting the issue of drafts, while unfortunately the country suffers from the lack of means of remittance to pay for importations. The bank has the privilege, by virtue

of its charter, of putting into circulation its paper or notes of the face value of 5, 25, 100, and 500 francs. Three times the amount of its specie, at any time in the vaults of the bank represents, according to said charter, the amount of paper it should have in circulation and no more. For instance, if it has 2,700,000 francs in specie (gold or silver) (\$521,100), it may have in circulation 8,100,000 francs (\$1,563,300) of its paper.

The foregoing explanation will lead the way to the exposition of other facts by which a clear idea of the present financial and commercial crisis and depression, and of the causes that have led thereto may be formed. It may be necessary to remark that the accumulated capital and profit of the people of this island have been and are being brought into requisition to pay their debts or contribute to do so from the deficiency of the value of exportations for several years. The yearly exportations have for some time almost invariably been less in value than importations, the balance of trade being constantly, at the end of the fiscal year, against the island.

The importations and exportations from 1888 to 1894, inclusive, together with the quantity of sugar crops during the same period, are given as follows:

Year.	Imports.	Exports.
	<i>Francs.</i>	<i>Francs.</i>
1888.....	22,916,449	23,454,902
1889.....	27,258,134	22,751,814
1890.....	30,261,349	23,350,115
1891.....	33,659,875	22,939,385
1892.....	33,110,028	18,384,916
1893.....	25,657,100	24,056,345
1894.....	29,116,758	22,511,077
Total.....	201,979,693	157,448,554
Excess in the value of importation.....		44,511,139
Total.....	201,959,693	201,959,693

The following shows the yield of central sugar factories during the interval above mentioned:

Year.	Yield.	Year.	Yield.
	<i>Kilograms.</i>		<i>Kilograms.</i>
1888.....	33,278,272	1892.....	19,421,721
1889.....	31,070,223	1893.....	32,208,104
1890.....	32,351,288	1894.....	37,916,145
1891.....	31,681,911		.

There has been during the period above mentioned but little variation, except in the yield of 1892, following the cyclone of 1891, which, with the destruction by fire of Fort de France, on June 22, 1890—another cause of embarrassment—is to be attributed, in a great measure, the present crisis. The brown, or muscovado, sugar manufacture and its exportation have, for several years, been steadily declining in quantity until it has almost disappeared and is not mentioned in the above statistics.

The crop of this year will, it is estimated, be about 7,000,000 kilograms less than that of 1894. The excess of imports, in comparison with exports, for the six months ending June 30 of the current year disappears, and it is refreshing to note 1,782,356 francs to the good—that is, exportation has exceeded in value to this amount; but, as another six months must elapse without any large values of exports occurring, except the rum or tafia that will be shipped to France in the interval, it is expected that this cheering difference may be altogether balanced, if not exceeded.

The Bank of Martinique had freely issued bills on Paris, and to unlimited but normal amounts to the time of the cyclone of August 18, 1891, when a loss in movable and immovable property, in crops of all kinds, in fruit trees, live stock, etc., of at least 70,000,000 francs (\$13,510,000) in the space of two hours spread dismay and desolation throughout the length and breadth of the land. At the time of the calamity a sugar crop, the largest on record, was expected for 1892. For a year its terrible effects were felt, especially by the growers of sugar cane; and when, last year, a very large yield had, so far as the acreage is concerned, been prepared, and would have been most satisfactory in its returns and helped to compensate for past losses and misfortunes, an unprecedented drought, accompanied by the lowest prices ever known, fell upon the island and has greatly accentuated the misfortunes of all classes. As soon as the full force of, and the destruction caused by, the cyclone were known, and the necessity for large importations presented itself to replace or repair properties in the towns and in the interior, and to obtain food stuffs, of which there were none whatever, the bank sold drafts without limit, deciding, at a most critical moment, to help the colony in its distress; but it could procure no means to reimburse the Comptoir d'Escompte National, from the absence of all kinds of produce, the destruction of crops being complete. The result was an accumulated liability in favor of the Paris Agency, obliging the bank, after advancing its rate of premium, to suspend draft selling during a part of 1892, 1893, and 1894 with a view to prevent its debt increasing. It now only draws limited sums monthly (from 150,000 to 250,000 francs at 9 per cent for 90 days' sight) awaiting the crop of 1896, when it has secured an agreement with the manufacturers to purchase all their drafts against sugar shipments at 2 per cent less than the selling rate of the bank at the time being. This will enable it, after the next crop has fairly commenced, to reduce its liability; until then its drawings will, of necessity, continue to be limited.

The impossibility of procuring sufficient drafts to remit the value of imports in coin, has led merchants and dealers to export all the gold and silver coin they could lay their hands upon. Gold has disappeared. French silver, such as 5-franc, 2-franc, 1-franc, and 50 and 20 centime pieces, has either been shipped to France as remittances or hoarded by the banks (Martinique and British Colonial) and by individuals, the latter of whom sell this coin at 10 to 12 per cent premium. The Government employees, who receive in part payment of their salaries gold and silver at par, sell all of it to cer-

tain customers at the rates of premium alluded to. The Bank of Martinique has been, in the present crisis, protected by a special law, which gives it the privilege of redeeming its paper (which guaranties its redemption in specie) by paying out national treasury notes, the holders of said paper being legally obliged to submit, as long as said special law is in force. Bank notes, of the value already stated, and notes of 2 francs and 1 franc, issued by the national treasury, now do the work of the small coin, substituting the latter in all the domestic and trade wants of the island, and facilitating the operations in their multiple forms of everyday life. The national treasury, I may remark, holds, or is supposed to hold, in specie, the equivalent of the sum in circulation of from 1,000,000 to 1,200,000 francs (\$193,000 to \$231,600) of these small notes. The Martinique branch of the British Colonial Bank of London has long since ceased to sell drafts, pays out no specie, and has greatly limited its affairs.

In the presence of restrained means of remittance, the probability as to the Martinique Bank not resuming drawings to an unlimited or to a larger extent than at present, until the next crop will have fairly set in; the absence of coin of any kind sufficient to meet engagements of importers, and a local paper currency, in effect depreciated, having no purchasing power beyond the limits of the island; with a tariff which binds it as with iron bands; with losses sustained for several years, and especially when a partial sugar crop and ruinous prices have left their sad traces, the present financial and commercial depression is, to my mind, the logical sequence of a combination of causes, aggravated by the persistency with which all the energy and capital of the island have been concentrated on the cultivation of sugar cane. Whatever may be the argument of the sugar-cane growers to explain the reasons why the secondary products have been neglected, the fact remains that it is imprudent, and frequently attended with disaster, to adhere to one system in a country the fertility and the favorable climate of which offer every facility for varied and successful crops. Much hope is entertained respecting increased yield and better prices than those ruling for the last six months for the sugar crop of 1896, when many inconveniences and privations now felt will, it is believed, either disappear or be much lightened.

Carefully taking into consideration the state of affairs here I may give, as my opinion, that the astonishing vitality of this island, and the aid expected later from the mother country, encourages the people to look for more prosperous times.

JULIUS G. TUCKER,

MARTINIQUE, *July 31, 1895.*

Consul.

UNITED STATES FLOUR IN MARTINIQUE.

Having learned that the Norwegian steamer *Gyller* had sailed on April 6, 1895, from Galveston, Tex., with 1,000 barrels of flour shipped here as a venture by the Star Flour Mills, of Galveston, and that the flour had duly

arrived, given great satisfaction, and found ready sale, but that no further shipments were expected to arrive, I called upon the secretary of the chamber of commerce, Mr. De Maynard, for information upon the subject. He courteously permitted me to take a copy from the minutes of the meeting of the chamber of commerce, where this matter had been fully discussed in French, of which I inclose a translation, which speaks for itself.

JULIUS G. TUCKER,

MARTINIQUE, *July 19, 1895.*

Consul.

[Translation.]

MEETING OF THE CHAMBER OF COMMERCE OF ST. PIERRE.

MARTINIQUE, *April 29, 1895.*

Present, Messrs. Lasserre, L. Gerard, Plissonneau, Delmond, Bébet, I. Cottrell, Paul Borde, A. Fortier. The following documents were presented:

LETTER FROM THE MINISTER OF THE COLONIES.

PARIS, *January 31, 1895.*

To the Governor.

SIR: The consul of France at Galveston, Tex., has sent over to the Minister of Foreign Affairs a report concerning the shipment to St. Pierre, by the Star Flour Mills, of a quantity of flour destined at first to Santiago de Cuba. In transmitting this document, Mr. Hannotaux deems it would be advisable to take into consideration at once the forming of a current of exchanges between Galveston and Martinique. This island, in return for the shipment of flour sent to her, could ship fruits, sweet preserves, and liquors. I have the honor to ask you to study this question, and ask the advice of the several consulting chambers of the colony upon the formation of this new current of exchange for the products of this island.

(Signed) HANNMAN,
For the Minister, etc.

LETTER FROM THE CONSUL AT GALVESTON, TEXAS.

GALVESTON, *November 10, 1894.*

To the Minister of Foreign Affairs.

SIR: I have the honor to inform Your Excellency of a shipment of flour from Galveston direct to one of our West India islands. On the 6th inst., the Norwegian steamer *Gyller*, Captain Rasmussen, chartered by the Texas Star Flour Mills, sailed from Galveston with a general cargo for Santiago de Cuba, St. John's, Antigua, and St. Pierre, Martinique. The portion of the cargo destined for this latter port consisted in 1,000 barrels of flour of the "Sea Fairy" brand. The "Sea Fairy" barrel of flour weighs 196 pounds (English), and gross, about 214 pounds; it is worth, in Galveston, \$3.08, which, at the rate of exchange—5.20 francs to the dollar—equals 15.86 francs.

This shipment of flour from Galveston to Martinique is a new departure, which has been brought about by the recent modifications in the customs tariffs between the United States and Spain. The new tariff of the United States, inaugurated on August 20 last, shows against the commerce of the Spanish islands in the West Indies. Spain retaliated by putting a customs surtax, which has had the effect of preventing the importation into her colonies of all flour coming from the United States. The Texas Star Flour Mills Company, which had an active business between Galveston on the one hand, and Cuba and Puerto Rico on the other, consisting in shipments of flour to those ports, and receiving fruits on the return voyage, finds itself, at this present time, obliged to look for new outlets for its goods. Hence this first shipment to Martinique, which, according to all probabilities, will be followed by many others to

the same colony and Guadeloupe. Our colonies could ship in return fruits, sweet preserves, and liquors, these last in small proportion.

[Signature illegible.]

From information received by the president of the chamber of commerce, it follows that the Norwegian steamer, as stated by the French consul at Galveston, has indeed arrived at St. Pierre with the 1,000 barrels of flour from the Texas company, consigned to Mr. M. Coipel. This flour landed in perfect condition, and the packages were also found to be perfect. The flour was sold on an average of 25.95 francs per barrel of 195 pounds (English), equal to \$5 (American), which leads us to suppose that this flour could be easily disposed of in the market of St. Pierre if further shipments were to follow that of the steamer *Gyller*.

It is in this connection that the firm of M. Coipel has written to the Texas Flour Mills Company while rendering an account of the consignment made of 1,000 barrels of flour. "But," adds the president, "that company proposes that the colony should ship in return for her cargoes of flour, fruits, bananas, sweet preserves, and liquors, and it is upon this new departure in exchange in products that the chamber of commerce is called upon by the director of the interior—according to the instructions given by the Minister of the Colonies—to give its views. I announce therefore, that discussion is in order upon this subject."

M. PLISSONNEAU: It is evident that both the Texas Star Flour Mills Company, and the French consul at Galveston, at the time at which they proposed the exchange of products between the last-named city and this island, were under the impression that, like other West Indian, British, and Spanish islands, Martinique could do a large business in bananas and fruits, such as cocoanuts, pineapples, oranges, etc.; but, unfortunately, it is not the case. The proposition, for the time being, can not be accepted, as the production of bananas and other fruits is not sufficient for exporting upon a large scale. We are, it seems, called upon unexpectedly, we may add, and this is the more to be regretted, as our fruits are looked upon as the best in the Antilles. Pineapples from Gros Morne are much sought after in France for preserve making, and the oranges from several sections of the island are known to be superior to those of the neighboring islands. Somewhat over two years ago a trial was made by a certain number of landowners to plant banana groves similar to those of the adjacent British islands. These landowners imported from Jamaica, at a very high cost, plants of the very best varieties—those which are most in demand in the United States markets. These plants were put into nurseries; all the attention that was required was given them, but, up to this time, it seems as if their efforts were not crowned with success. The trial has, for some unknown cause, failed. It will be taken up again, we are assured, but when and how? We are passing through a critical period at this moment, which allows no one to venture on such trials, which always entail very heavy expenses.

M. LEON GERARD: It is necessary, it seems to me, to establish this starting point. It is not "local initiative" if I may thus express myself, that created the large banana plantations and the planting of other fruits as now existing for several years in our neighboring British and Spanish islands. These plantations have been created with capital from the United States. The largest portion of the vast banana groves of Jamaica, which are the great purveyor of fruit for the American markets, belong to the Boston Fruit Company, to the Jamaica Fruit Company, of Philadelphia, and to a great number of merchants, combined together to work up this particular branch of business. All have agents residing in the principal towns of Jamaica and Cuba to make contracts with the growers of bananas and other fruits, and who, besides, centralize at every port the products thus obtained and ship the goods to the United States by steamers specially adapted for that trade. It is evident that, had we had the secret or the good luck to call to us American capital, or if our colony had been able to interest the speculators from the United States like Jamaica, Trinidad, and Cuba, to the working up of our soil, so fertile, so rich in water supply, in propitious valleys and in so many other natural advantages which produce good fruits, we would to-day be in a measure able to accept the proposition offered to us by Galveston. We, too, would have a precious resource that would alleviate largely the burden of our present difficulties and embarrassments. But,

reduced to our own means, what can we do? What can we undertake when we have already so much trouble to fight against the dangers that menace us all around? Later on, enlightened by experience and aided by foreign capital, we will be able to realize and maintain to the satisfaction of all parties concerned, the exchange of products proposed by the Texas Star Flour Mills Company, of Galveston.

After a short discussion, which throws no further light upon the subject than already stated by Messrs. Plissonneau and Gerard, the members of the chamber of commerce were solicited by the president to express their views in regard to the establishment of an exchange of products which Galveston would like to open at once with our colony: "Resolved, that the said project is, for the present impossible, owing to the very limited quantity of fruits and bananas raised upon the island, and also to the limited manufacture of liquors and sweet preserves."

After which the meeting adjourned.

PROPOSED TARIFF CHANGES FOR UNITED STATES PRODUCTS.

I have the honor to report that the newly installed governor of Martinique, Mr. Noël Pardon, paid this city the first official visit yesterday, June 25. The city was handsomely decorated with flags, flowers, and shrubs. The governor arrived here from Fort de France, the official seat of the government, at 8 o'clock a. m., upon the French cruiser *Roland*, and was received by the civil and military organizations of the city, followed by an immense procession of citizens. As it was known that His Excellency would return to Fort de France in the evening of the same day I did not expect a visit from him, but contrary to my expectations he called at the consulate in the afternoon, accompanied by the secretary of the interior and the mayor of the city of St. Pierre, and paid me an extended visit.

With reference to the import duties levied upon American products, I pointed out to His Excellency the great benefits which would accrue to the merchants and citizens of the island if the duties were modified, thereby enhancing and stimulating business, and especially the carrying trade. His Excellency assured me of his great desire to see the duties reduced, and also assured me of his good will toward the United States.

Should the excessive import duty now levied be modified, I have no doubt but that a largely increased trade with the United States will follow. Even as it is, there is a heavy importation of flour, corn, lard, pork, beef, butter, kerosene, etc. All the merchants with whom I have thus far come in contact (and I have made it my special business to see the most prominent), agree upon the point that protective duties as now levied upon all imports have proven a failure, and they have assured me that they are using every effort to have the duties modified, as the present system has virtually driven the trade from Martinique to the adjacent English islands, such as Barbados, Trinidad, St. Kitts, and others, where all kinds of merchandise and outfittings for vessels can be procured at greatly reduced costs.

JULIUS G. TUCKER,
Consul.

MARTINIQUE, *June 26, 1895.*

DIVERSION OF SUGAR EXPORTS—EAST INDIAN RICE.

I have the honor to report that I met here a gentleman from St. Croix (Santa Cruz), Danish West Indies, named D. Dessau, who is a prominent merchant and exporter from that island. Mr. Dessau informed me that there was but little sugar exported to the United States from the Danish West Indies, and that during the coming season none would go to the United States, owing to the customs difficulties at New York, in consequence of which all their sugar would be shipped to Halifax.

As a curious circumstance, I would also state that the above-named gentleman came here to meet a vessel belonging to him, which had just arrived at Martinique with a cargo of rice. This rice, he informed me, was shipped from the East Indies to Copenhagen, Denmark, from whence, after being cleared, it was shipped to this point and Santa Cruz. He assured me that, even after the long voyage, the rice was cheaper than it could have been purchased in the United States.

JULIUS G. TUCKER,
Consul.

MARTINIQUE, *July 19, 1895*

INTERSTATE TARIFFS IN MEXICO.

The amendments to the Mexican constitution proposed by Finance Minister Limantour, having for their object the abolition of the interstate tariff duties known as the *alcabala*, are before the Mexican Congress, now in session, and have been strongly urged by President Diaz. In view of the general interest and importance of the subject, I have deemed it advisable to incorporate the main features of the amendments in the form of a report. The text of the amendments is as follows:

First. Section 3 of article 3 of the federal constitution is hereby amended and enlarged in the following form:

The States shall not—

- (3) Coin money, issue paper money, stamps, or stamped paper.
- (4) Tax passage of persons or effects through their territory.
- (5) Prohibit or tax, directly or indirectly, the introduction or exit from their territory of domestic or foreign merchandise.
- (6) Impose on the circulation or consumption of domestic or foreign merchandise duties or taxes of a nature to be collected by internal custom-houses, or to require the opening or examination of packages, or to necessitate the transportation of goods under fiscal documents.
- (7) Issue or maintain laws or fiscal enactments implying distinction as to taxation or requirements, based on the places of origin of domestic or foreign merchandise, and whether the distinction be enforced by way of protection to local production or by way of favor to products coming from a given locality.

Second, Article 124 of the constitution is amended in the following form :

“ It is the exclusive privilege of the powers of the Union to tax merchandise on its importation or exportation, or passage in transit through the national territory, as also to regulate at all times, and even to prohibit for reasons of public safety or police, the circulation in the interior of the Republic of any kind of merchandise whatever may be the place of its origin.”

These reforms shall come into force on the 1st day of July, 1896.

IMPORTANCE OF THE MEASURE.

These proposed amendments deserve more than passing mention. They seek the overthrow of an evil centuries old, fixed in popular habit and prejudice, and backed by powerful official interests.

If pushed (and there is reason to believe they will be), they may provoke a struggle which will determine Mexico's place in modern progress and be decisive of the national supremacy. If passed and enforced, our trade with Mexico will be greatly increased.

They are now before Congress and strongly advocated by President Diaz, who, in his message of September 16, 1895, urges their adoption as “a reform demanded by agriculture and the industries of the nation, which need a wider field for their products, and by business men, who justly insist on greater freedom of action.”

TARIFF TAXATION IN MEXICO.

Mexico is a tariff-taxed country. Indeed, the extent to which the tariff system prevails and the time it has endured ought to be a complete and convincing test of its merits. Introduced in 1578, it is about the only political institution which has survived in all its crudity the country's innumerable crises.

Far more than with us, the tariff is favored as a means of nourishing the body politic. The American Constitution forbids other than the external application of it; here it is taken internally as well. Besides a national tariff, every one of the twenty-seven States, the Federal District, and Territories, and almost every municipality has each its separate tariff, on the principle, I suppose, that what is good for the whole ought to be good for each of its parts. These different tariffs are of all kinds and conditions. There are the high, the low, the tariff for revenue only, for revenue with incidental protection, the out-and-out tariff for protection of home industries, and others whose character is unclassified.

The foreign merchant learns them all by hard experience. At every national port of entry he must stand and deliver to the nation, at every state boundary he must pause to pay tribute to the state, and each municipality he enters levies new exactions. In this latter respect, however, he is no worse off than the native Mexican. He, too, encounters the tariff if he seeks a market beyond the narrowest local limits.

Yet it is the boast of the tariff system here (as with us) that the “foreigner pays the tax.” The logic of this claim is simple; following the natural disposition to shift their own tax burdens on some one else, each State of Mexico is foreign to every other.

LOCAL TARIFFS.

In fact, lesser Mexican communities have frequently sought this ready relief from self-taxation by setting themselves up, for tariff purposes, as distinct territories (*distintos suelos*), and there were at one time thus established 276 tariff districts. Each of those districts reasoned that it could make the other 275 pay its taxes and so set its *alcabala*, or tariff tax, accordingly.

But it is impossible in any game for every one to get the best of it. No people can profit by mutual imposition. The 276 tariff districts preyed on each other with obvious results. Traffic and revenue shrank, industry was dwarfed, enterprise crushed. The evil grew so manifest that there was a general outcry against it, and leading statesmen urged its abolition. Then began the movement which is now culminating in the proposed constitutional amendments.

EFFORTS FOR TARIFF REFORM.

A history of Mexico's efforts to rid herself of the *alcabala* is instructive reading to all who are impatient with the seeming dilatoriness of tariff reform in the United States. It teaches how a custom once tolerated becomes rooted in the very nature of a people.

As early as 1824, there was adopted a national constitution which guaranteed liberty of commerce. This, it was thought, would put an end to the *alcabala*. It didn't; the system was defiantly maintained. On October 14, 1846, Congress, by formal enactment, declared the *alcabala* abolished, but threats of revolution forced its reestablishment. On June 14, 1848, it was suppressed in the Federal District and territories, but in a few short months Santa Anna restored it. On November 24, 1855, another general law was passed prohibiting it, but the law was repealed before the date set for its enforcement. The new constitution of 1857 reasserted the exclusive right of the Federal Government to regulate foreign and domestic commerce. With the empowering sanction of this fundamental law, an act was passed providing that from and after January 1, 1862, the *alcabala* should forever cease. But on April 14, 1862, the act was repealed, the *alcabala* re-established, and the duties under it doubled. In 1869 and 1877, other measures were promulgated, only to prove equally abortive. The *alcabala* continued.

In the belief that the error of all previous legislation had been the insufficient time given to the several states to adjust their fiscal systems, it was enacted in 1881 that from and after December 1, 1884, there should be no *alcabala*. This was subsequently extended to December 1, 1886, by which date both the law and the spirit of reform which created it seemed to have died of inanition. In 1890, a national convention was held to consider the question. It consisted of delegates from all the states, duly empowered. Their deliberations lasted until April 1, 1891, when it was solemnly agreed that the *alcabala* was an evil and that the whole system of interior custom-

houses should be done away with. But nothing came of it; the state and local tariffs were levied and collected as usual.

It is claimed that in a few of the states the *alcabala* has been practically abandoned. But the first state to which that credit is given is the State of Tamaulipas, wherein this consulate-general is situated. So far from giving up the system or even advancing in the line of reform, Tamaulipas has retrograded, for, while nominally renouncing the *alcabala* duties for the State itself, the tax, with all its objectionable features, has been transferred to the several municipalities.

The following is the schedule of the *alcabala* duties of the municipality of Nuevo Laredo, in the State of Tamaulipas, which is fairly illustrative of the system elsewhere:

Schedule of duties.

Alcohol, foreign, will pay 5 per cent of the import duties collected by the custom-house.

Liquors and spirits of grape or cane.....	per 100 kilograms, gross...	\$4. 50
Leather, manufactures of, all classes not otherwise specified.....	do.....	3. 00
Boots, gaiters, and shoes.....	per dozen...	. 50
Wax, manufactures of.....	per 100 kilograms gross weight...	2. 00
Lime, common.....	do.....	. 03
Cassimeres, woolen, domestic.....	per lineal yard...	. 06
Coffee.....	per 100 kilograms...	. 50
Cigarettes.....	per 1,000 packs...	3. 00
Chocolate.....	per 100 kilograms...	. 50
Cocoa.....	do.....	. 50
Chile, pepper.....	do.....	. 50
Sweetmeats, jellies, paste, etc.....	do.....	2. 00
Bridles:		
Common.....	per dozen...	. 25
Fine	do.....	. 50
Saddletrees:		
Common.....	each...	. 15
Fine	do.....	. 25
Frijoles (beans).....	per 100 kilograms...	. 10
Blankets.....	per dozen...	1. 50
Fruits:		
Fresh.....	per 100 kilograms...	. 25
Dried.....	do.....	. 50
Garbanzos (pease).....	do.....	. 10
Cornshucks	do.....	. 25
Rope, ixtle, etc., not otherwise specified.....	do.....	. 25
Earthenware	do.....	. 25
Vegetables.....	do.....	. 15
Metates and manufactures of stone.....	per 10 kilograms...	. 25
Pilloncillo or panocha sugar.....	per carga of 300 pounds...	. 25
Cigars:		
Common, loose.....	per 1,000...	1. 00
In boxes.....	do.....	5. 00
Pulque, of all classes.....		. 50
Skins, tanned, all kinds.....	per dozen...	. 25

Reatas, lazo ropes, fine.....	per dozen...	\$0.25
Rebozos (shawls), fine.....	do.....	.50
Saddles:		
Fine.....	each...	1.00
Common.....	do.....	.50
Hats:		
Felt.....	per dozen...	2.00
Wool.....	do.....	1.00
Jipijapa, fine straw.....	do.....	2.50
Common palm.....	do.....	.50
Tobacco, leaf.....	per 100 kilograms...	1.00
Toquillas (hatbands).....	per dozen...	.25
Bulls, not destined for slaughter.....	each...	1.00
Sole leather.....	per dozen sides...	1.50
Mescal (liquor).....	per 100 kilograms...	4.50
Wines, claret and others.....	do.....	2.50
All other goods or products not specified in this tariff will pay for each 100 kilograms gross weight.....		
		.25

In this schedule there are fifty-one separate classes of articles subject to a tariff duty ranging from 6 cents per yard on cassimeres to \$5 per thousand on cigars; and at the end of the classified list (so that nothing may escape), there is an omnibus clause to the effect that all articles not specified shall pay 25 cents per 100 kilograms.

Nuevo Leon, which is another State named as free from the *alcabala*, has a system as oppressive as Tamaulipas, and the Federal District itself, the seat of government where if anywhere reform ought to be manifest, leads all the rest in the severity of its tariff taxes, collecting annually from a single article (pulque) over \$400,000.

Despite the consensus of opinion of the best men of all parties, despite the determined efforts of seventy years, the *alcabala* continues to be the main source of state and municipal revenue.

EVILS OF THE SYSTEM.

With so many different tariff schedules, utterly devoid of uniformity, each shaped by special local circumstances, each changing from time to time with the whim of local lawmakers, the trials of the merchant who attempts any extended business in Mexico may be imagined. "Tariff tinkering," ever a menace to trade, increases with the number of the tinkers. Thus it is that every state legislature, in annual session, is prone to revise the *alcabala* of the state. Every municipal council (bodies corresponding in functions and character to a compound of our county boards and boards of aldermen) at its weekly session may propose changes in the *alcabala* of the district.

Tariff fanatics abound here as elsewhere, who are always urgent for increased tax, always on the alert for new victims of taxation. It can be readily conceived that trade generally is handicapped by this uncertainty, and particular branches of trade subjected to gross injustice.

AMERICAN INTERESTS AFFECTED.

To Americans, the system is particularly harassing: The native who has grown up under it naturally conforms to it, and the European has had experience with similar customs in Europe; but the American, unused to arbitrary restraints and exactions by states and municipalities, finds them intolerable. Many an American, after a brief experience with the *alcabala*, has left the country; many who remain are in constant conflict with the authorities.

I said at the outset that the passage and enforcement of the proposed amendments would greatly increase our Mexican trade. This is no exaggeration. By reason of the *alcabala*, we have not a tithe of the trade that naturally belongs to us. Frenchmen, Germans, and other Europeans who readily conform to such customs take the place that is properly ours. The system has restricted American enterprise, repelled American capital, and checked American emigration. It is the worst obstacle to-day in the way of developing American interests in Mexico. America, therefore, next to Mexico herself, is concerned in the movement for its abolition.

BRIGHTER PROSPECTS FOR REFORM.

Whatever the results of the present Congress, I have faith not only in the ultimate passage of the proposed amendments, but also in their subsequent enforcement. The fate of similar movements in the past is no criterion now; the Mexico of to-day is a new creation. The *alcabala* belongs to the period of the ox cart and the pronunciamento; it is out of place with steam, electricity, and a virile national authority.

States habituated to this devious form of revenue, people not yet educated to its oppressiveness, and officials profiting by its abuses will fight the reform to the death. But there is in its favor a public opinion more enlightened than ever before, and a resolute national administration that can make its influence felt in every part of the Republic. Hence the significance of the language of President Diaz in his message:

This proposal affects the vital interests of the country and is certain to meet with cordial reception at your hands, especially in view of the unusually propitious circumstances of the Republic at the present moment for effecting so important a reform.

JOSEPH G. DONNELLY,
Consul-General.

NUEVO LAREDO, *September 19, 1895.*

YUCATAN: RESOURCES, COMMERCE, ETC.

The State government of Yucatan is now engaged in taking a census of the population, which approaches completion. The officers experience great difficulty in the prosecution of the work on account of the prevalent opinion among the illiterate in the isolated districts that names are wanted

for enrollment in the Government military service, and in this belief the people evade the census takers. However, from data already received and official estimates, the total population approximates 500,000, including the capital (Merida), which has about 60,000.

The mortuary reports for the three months ending June 30 of the present year show the principal fatal affections to have been fevers, pneumonia, dysentery, whooping cough, and diseases peculiar to children. As yellow fever is supposed to be endemic here, it will be learned with some surprise that only two cases appear in the above report, notwithstanding the months of April, May, and June are the most favorable for the propagation of this terrible malady. This can be attributed to the absence of foreigners, who are almost exclusively the prey of yellow fever, the natives being practically exempt from it. During the winter months, it is dormant, and then even the foreign resident incurs no risk.

LABOR CONDITIONS.

On the plantations, where it is necessary to be exposed to the excessive tropical heat under the direct rays of the sun, no laborers have withstood it as have the native Indians. In past times, many colonies were formed from European countries. Among the first experiments were Italians and Slavs, but they soon disappeared from the face of the earth. Later on (in the sixties) some forty odd families of German peasants were brought here, and they too, with the exception of a very few, succumbed to these fatal fevers. They originally numbered about three hundred. Before the slave trade with Africa was entirely abolished, several shiploads of negroes found their way to the shores of Yucatan. In the absence of statistical data relative to them, my information is that they were less subject to the climatic fevers and diseases that attack other foreigners, and in proof of this there still remain a great number of negroes in this country. It is said on good authority that the majority of those brought at that time, after serving many years on the plantations, sought opportunities to emigrate into the interior and along the coast points of Mexico. Later still, a batch of Chinese were contracted for to work on the hemp plantations, and although they are not so susceptible to disease they were not altogether satisfactory, inasmuch as they are physically unable to complete the daily task allotted to the native laborer—that is, to cut a certain number of leaves of hemp (sisal) for a stipulated price. The daily task is two or three thousand leaves, at the rate of 16 cents (gold) per thousand. On this, largely depends the pecuniary success of the planter. Not that his margin of profit is so limited in what it actually costs to produce this fiber, but the enormous outlay for the preparation of the lands and the planting; the necessary delay of four to five years before the plant is large enough to cut; the instability of the market, which is ever fluctuating; the onerous export duties, State and federal; the large personnel of the plantations—mechanics, overseers, and servants—who, independent of their wages, are advanced provisions, clothing, and furnished medicines and

medical attention by the proprietor. There is now a great scarcity of laborers, and with the new applications of the sisal fiber and its increasing demand, it is becoming a serious question with Yucatan how to meet prospective emergencies.

MAYA INDIANS AND THEIR COUNTRY.

A project is on foot by the State, in cooperation with the Federal Government, to subdue and domesticate the Maya Indians, who have from time immemorial held invincible sway over the southeastern part of Yucatan. It is hoped thereby to draw from them to augment the number of farm hands, but even in the event of accomplishing the subjugation of this semibarbaric race, it is exceedingly doubtful if the present generation can be utilized, as they are refractory to civilized pursuits and are indolent and thriftless. The tribe is variously estimated at from 10,000 to 20,000. Their trading posts are on the boundary line of British Honduras. At times their chiefs visit Belize, the capital of that colony, to make purchases of cloth and to replenish their ammunition, as also to renew their contracts with the timber merchants, who pay them so much per ton for the privilege of cutting wood in their territory. They are friendly with the British, and never interfere with the negro cutters who are sent from Belize, but a Mexican or a native of Yucatan dare not encroach upon their lands. As this part of Yucatan is more healthful, and its soil better adapted to the cultivation of fruits, cane, and grains, it is not improbable that, after the pacification of the Mayas, the Government will offer inducements to the foreigner who would seek a home in the tropics. The geographical and the topographical situation of this part of the peninsula would indicate that it is essentially a horticultural district. Hard down by the Caribbean Sea, it is easily accessible to shipping, and its products would find a market. It lies in the path of vessels that now ply between the southern ports of the United States and the ports of British and Spanish Honduras. This would also be the route for vessels to and from Nicaragua in the event of the building of the canal. Another advantage of transcendent importance is that Ascension Bay, which lies in this territory, is one of the largest and deepest in all Mexico, and, with the exception of Acapulco, on the Pacific, it affords a safer harbor than any. This is a desideratum of no little magnitude when it is known that most of the Mexican Gulf ports are open roadsteads, and in the winter months, when northers are frequent, shipping is hazardous and uncertain.

WAGES OF LABORERS.

Laborers in the cities are paid by piecework in the industrial pursuits, and average about 50 cents (gold) per day; drivers and conductors on the tramways, about the same; locomotive engineers and stevedores, 75 cents to \$1 (gold); and railway brakemen, 50 cents. The average workday is eight hours.

The genial spring temperature, which is almost uniform throughout the year, is providential for the laborer. The same texture of fabrics for clothing

serve through the different seasons. These consist chiefly of cotton and linen. Sandals of the ancient Egyptian pattern are worn instead of shoes.

Among none of the laboring classes do trades unions exist. Compacts are unknown among them. They are very indifferent sympathizers with each other, except on the interference of anything or anybody foreign, in which case they are exceedingly sensitive and will band together for resentment.

The people are very industrious. Necessity would impel them were they otherwise, for although Yucatan is not an overpopulated country, the industries here are so concentrated, so lacking in diversity, and so monopolized, that the less fortunate are continuously at a disadvantage, and must necessarily be on the alert to share in the inadequate distribution. This applies also to the professions.

EDUCATION.

Yucatan has always been considered among the most advanced states of Mexico in education. She has been in constant intercourse with the outside world since the days of the conquest. Schools have attained to a high order since the advent of independence. While under the control and supervision of the local governments, the system of matriculation and education is mapped out by the federal and state authorities through their respective boards of education. The law is compulsory, and though not strictly enforced in Yucatan, reports show a good attendance, which augurs well for the State.

Sectarian schools controlled by the church party, are in decadence. In fact they are only primary schools for the young. Their revenue for support is derived from donations by patrons. The nonsectarian, or public, schools are maintained at the expense of the State. The governor appoints directors, who in turn select professors and teachers.

Statistics show the total expenses for public instruction for the scholastic year, 1894-95, to have been \$100,000 (gold) approximately. This amount sustained 275 primary schools, 155 preparatory schools, 1 normal school, 1 medical and surgery school, 2 jurisprudence schools, and 1 pharmacy school.

MANUFACTURES.

We have several small manufactories that supply local wants, such as soap, matches, candles, shoes; rope, and bags (handmade), carpenter shops, ice factories and others of less import.

RAILROADS.

There are four railways, one broad gauge and the others narrow gauge. The first named has a total of 75 miles in operation; the others average each about 60 miles, completed, and are in active course of construction. They are owned and operated exclusively by natives. Tariffs for passengers and freights are about half the rates charged for local business by the railways of the United States.

AGRICULTURE.

Except wheat, rye, and small grain, almost any plant thrives here when the seasons are favorable, but the principal products are corn, beans, sugar, and hemp. The latter is a phenomenally hardy plant and flourishes almost equally as well with or without rain, while corn, beans, and sugar require irrigation; and even when seasons are good, the yield is barely sufficient for supplying home requirements. If there is a partial failure (as is at present the condition respecting corn), the deficiency is supplied from the interior of Mexico or from the United States. The interior being unable to make up the deficiency in corn, the legislative authorities of Yucatan petitioned the Federal Government to reduce the import duties on foreign corn, that this necessary article should be within the limit of moderate prices. The Government scaled the tariff 50 per cent pending the next harvest. Since this decision, several cargoes have been imported from the United States. Had this action not been taken, the greater consumers of this article—the poorer classes—would have undergone much suffering.

The ostensible object of the high tariff here on imports is to insure the sale of what is produced in the country; but, granting that there is abundance of the article so protected, the benefit accrues not to the populace but to the producer or owner of the commodity, for the selling price, no matter how exorbitant, is scheduled to correspond to the cost price of the foreign article, with the major part of the protective tariff added. For example, less than five years ago Yucatan imported from the United States, on an average, 2,000 barrels of flour monthly; to-day, much less than 1,000 barrels. Flour has become a luxury, and only those in better circumstances can afford it.

The tariff was increased to allow the establishment of flour mills in the Republic—not that sufficient grain was grown to supply actual demands of consumption, but to stimulate agriculture to that end. Some mills near the border, in the northern districts of Mexico, have imported wheat from the United States, having ample margin in the high tariff to leave them a good profit. It appears at first sight that a cheaper grade of flour milled in the United States could be imported, to force an equilibrium through competition, as the best flour milled in Mexico is of inferior quality, but this is impracticable from the fact that the tariff imposes one tax only which applies to all grades without discrimination, so that those who can afford the better grades of flour milled in the United States are compelled to pay exaggerated prices for it, and those who can not, and purchase the home-milled flour, not only pay abnormal prices for an inferior article, but thereby contribute to the support of an industry that, almost literally speaking, “takes the bread out of their mouths.”

COMMERCE.

Up to 1891-92, the credit of Yucatan in Europe was unlimited, and her merchants enjoyed an enviable reputation for honesty and integrity and for the promptness with which they met their financial obligations, but at that

time they were overtaken by the crisis that prevailed everywhere and found them overstocked and deeply indebted. Collateral securities began to shrink, debts contracted in gold had to be met with its equivalent in silver, which had coincidentally depreciated in its paying value 50 per cent; money became stringent, and finally the collapse came, when twenty odd large dealers in dry goods and miscellaneous articles were crushed under the avalanche. These, together with others who have since been forced to suspend, represent millions to European creditors, which, unless something phenomenal transpires, is hopelessly lost. This unfortunate state of affairs is largely due to the long-credit system for which the European merchants are proverbial. However, this salutary lesson has had the effect of restricting them to more sagacious and businesslike methods—limited sales and short credits. This being the case, the tide of trade will eventually turn to the United States, this market affording quicker transportation facilities by reason of its proximity. Inasmuch as the greater portion of the products of Yucatan are marketed there, it stands to reason, from a reciprocal point of view, that it is only a question of time for the United States to succeed to this business.

SUGGESTIONS FOR UNITED STATES EXPORTERS.

But there are other things to be considered by our merchants to successfully compete with Europe for the custom of the Latin-American countries. The standard weights and thicknesses of goods suitable for the United States and the colder climates are absolutely unserviceable in the tropical countries. Machinery, engines, boilers, etc., must be constructed to fulfill certain functions of work peculiar to the industries and usages to which they are applied, and to be the least complicated, strong, and safe, to better endure rough treatment at the hands of the uninstructed mechanic who is to have charge of them.

Another item of incalculable importance is the proper boxing and packing of the goods for long voyages, so that they will reach their destination intact. In this, it is claimed that the European merchants excel us by far. I should especially advise that our merchants have the wants of the people intelligently investigated, with the object of supplying them according to their customs and caprices.

IMPORTS.

The chief articles of foreign import embrace all kinds of groceries, canned goods, etc., that would be found in a first-class and well-managed grocery store in the United States; dry goods, notions, cashmeres for men's clothing, men's furnishings, millinery, and hardware of all descriptions (except plows, hoes, etc., for agricultural purposes—common in the United States—are not used).

EXPORTS.

Hennequen (sisal) is the chief product. The annual output reaches in the neighborhood of 400,000 bales of 400 pounds each. The following

extract from official sources, for the first quarter of the present year, is a fair average: Bales shipped, 81,030, of a total value of \$1,082,123.28 (\$582,932.50, United States currency), on which state duties amounting to \$35,171.79 (\$19,012.76, United States currency), and federal duties amounting to \$97,308.77 (\$52,599.38, United States currency), were paid. Thus it will be seen that, combined with the cost and the many difficulties to the planter already cited, he must pay for the privilege of marketing his product over 12 per cent ad valorem.

Of the 81,030 bales shipped, 66,269 were destined to the United States. With the exception of a small fraction, they were transported in other than American vessels. This is not the exception, but the rule. The records show for the month of August, imports amounting to 6,568 tons, of which 2,133 tons were imported in vessels flying the American flag, and 4,435 tons in English, Norwegian, and German vessels. The exports amounted to 6,600 tons, of which 560 tons were exported in vessels flying the American flag, and 6,040 tons in English, Norwegian, and German vessels. These figures show an irreconcilable disparity against the merchant marine of the United States.

For six months ending June 30, destined to interior points of Mexico, there were shipped 3,070 tons of coarse, unrefined salt. The high tariff on foreign salt, makes this article an expensive necessity. The home mines are difficult to work, and as in most cases they are only surface deposits of the sea, the yield depends greatly upon the condition of the weather.

The exports of logwood for the first three months of the present year, show 2,634 tons cleared for European countries, valued at \$148,000, or \$80,000 in United States currency. Other articles of export in small quantities are hides, hammocks, sarsaparilla, etc. The total declared exports to the United States for the fiscal year ending June 30, were: From Progreso, \$2,062,909, in United States currency; from Merida, \$897,702; total, \$2,960,611.

CUSTOM-HOUSE FIGURES.

To omit no item in my report, I addressed a communication to Señor Romero, collector of customs at Progreso, asking him to give me the exact figures of the movement of trade for the fiscal year 1894-95, and the following abstract was kindly furnished: Value of imports during the fiscal year 1894-95, \$1,092,981; value of exports, \$8,376,680. The total amount of federal duties paid thereon was \$1,155,932. Without deducting the duties, it will be seen that the balance of trade is in favor of Yucatan to the amount of \$7,230,784, or, \$3,900,850 in United States currency.

R. L. OLIVER,
Consul.

MERIDA, *October 1, 1895.*

BANANA TRADE OF COLOMBIA.

During the month of July two shipments of bananas were made from this city to New Orleans, the first shipments of this fruit that have been made in the history of Cartagena.

Hitherto, so I am informed, the banana trade of Colombia has been confined to Santa Marta, a seaport not far from Cartagena. To what extent bananas have been cultivated in the former locality, I have been unable to ascertain. Judging, however, from the fact that three steamers a month ply between Santa Marta and New Orleans for the sole purpose of transporting the bananas, the Santa Marta plantation is presumably a considerable one.

In April, 1894, the Cartagena-Magdalena Railroad Company, an American corporation doing business here, took possession of a piece of land, which they have since named La Vinda, situated on the line of the railroad 53 kilometers distant from Cartagena. This property is 2,398 acres in extent. Up to date, 753 acres of this land have been cleared, but so far only a portion of the cleared land has been cultivated—that is, 93,607 banana plants have been put into the ground, besides a considerable quantity of corn, yams, and cocoas (a food product eaten like the yam) for local consumption.

Although, since the planting of these bananas, this section of the country has experienced a most unprecedented dry season, extending even into this month, the experiment has yielded results that, under the circumstances, are highly gratifying to the planters, and certainly indicate that the soil and climatic conditions here are favorable to extensive banana cultivation.

In six months from now it is expected that all the plants put in at La Vinda a year ago will be bearing their full quota of fruit. This will amount, it is estimated, to about 25,000 bunches of bananas per month. It is the intention of the company, however, to continue planting until this monthly capacity is at least doubled. When the latter limit of production is reached, it will become necessary to enlarge the transportation facilities between this and foreign ports, and to that end, so I am informed, a regular service of steamers, running at intervals of ten days between Cartagena and the United States, is now contemplated by the railroad company. Whether these steamers will make New York or New Orleans their port of discharge, is still an open question, although from certain indications in the respective markets, it is probable that New Orleans will be chosen. Besides shipping to the United States, it is proposed to send bananas to England as an experiment.

As regards the net profits to be expected from this new enterprise of the Cartagena Railroad Company, it is difficult to offer any reliable figures until more and larger shipments of bananas have been made, and the prices in the home market have thus become more definitely established. On a rough estimate, 50 cents per bunch is given as the outside figure representing the total cost to the company on delivery of the fruit in New Orleans. In the latter city, it is calculated that the average price will be about 75 cents per bunch.

Of course, this all depends on the quality of fruit obtained, but as that has so far proved to be satisfactory, a large proportion already produced reaching the standard technically known as "puts," or bunches of eight hands and upwards, a good market value is anticipated. Should this expectation, however, not be realized, and the profits from this plantation fall below the average obtained elsewhere, the enterprise will not be relinquished, as the carrying of the fruit will form a large item in the local freight of the railroad, the price for portage over the line being 20 cents (gold) per bunch.

On the whole, the outlook for a profitable business in the cultivation of bananas here appears to be most promising, and the results up to date, together with the certain indications of good crops in the near future, amply justify this company in their original investment of \$30,000 (gold), the price paid for the land and its clearance of forest timber.

I am told also that the same company has other large grants of land near the line of the railroad suitable for cocoa and other products, which will be developed in the near future.

CLIFFORD SMYTH,
Consul.

CARTAGENA, *August 17, 1895.*

OLEOMARGARINE IN PUERTO RICO.

With reference to shipments to this island of oleomargarine and butterine as butter, I have the honor to inclose herewith a copy with translation, of the order, dated July 17, issued by the chief of the customs authorities of this island to the collector at this port with regard to the shipment of this article made from New York on the steamship *South Cambria*, arriving at this port on the 20th of June last.

In this, considering that it is the first time that an analysis has been made, there is only imposed a penalty equal to the duty on butter, and it is required that the merchandise be reexported or rendered useless.

I also inclose an extract from the Puerto Rico Official Gazette, with translation, containing a general order, also dated the 17th of July, setting forth the penalties to which future shipments of this article to Puerto Rico will be subject, as provided by article 151 of the customs regulations. A copy and translation of the above article is also inclosed. The penalty is, as already described in the order issued to the collector, varying from one to five times the duty on butter taken as a similar article, according as there are, or are not, attending circumstances of fraud; but in every case, the re-exportation or rendering useless of the merchandise is required. A definition of what is considered as fraud is also contained in this article of the regulations.

W. H. LATIMER,
Vice and Deputy Consul.

SAN JUAN, PUERTO RICO. *August 25, 1895.*

[Translation.]

COMMUNICATION FROM THE CENTRAL ADMINISTRATION OF RENTS AND TAXES TO THE
COLLECTOR OF CUSTOMS AT SAN JUAN, PUERTO RICO.

In view of the report of the chemical expert of the laboratory of the custom-house on the analysis of the contents of tins imported by the English steamship *South Cambria* from New York, on the 20th of June last, covered by entry No. 3,628 of Messrs. Pieras & Co., No. 3,645 of Messrs. Cerecedo Hermamos & Co., and Nos. 3,659 and 3,680 of Messrs. Latimer & Fernandez, and therein described as butter, that the said analysis proved the contents to be oleomargarine, His Excellency the intendente, in conformity with the advice of this department, and, taking into consideration that it is the first time that an analysis has been made, has been pleased to decide that, in all cases that have occurred to date, a penalty limited to the amount of the tariff duty on butter be alone imposed, and that the merchants be obliged to reexport the article within a limited time or permit its being rendered useless. Furthermore, the said superior authority orders that the carrying out of the foregoing decision will have to be proved at this department.

[Translation.]

CENTRAL ADMINISTRATION OF RENTS AND TAXES OF THE ISLAND OF PUERTO RICO.

In view of there having been presented for entry at some of the custom-houses of this island several cases, the contents of which were stated to be butter, but which turn out to be oleomargarine, as proved by the analysis made by the chemical expert of the laboratory of this capital, His Excellency the intendente, in conformity with the proposal of this department, has been pleased to decree that importers be warned that, in future, if the like occurs again, they will have imposed upon them the penalty provided by paragraph 9, article 151 of the custom-house regulations, and that they will be compelled to reexport the merchandise within a limited time or permit its being rendered useless.

[Translation.]

EXTRACTS FROM ARTICLE 151 OF THE PUERTO RICO CUSTOM-HOUSE REGULATIONS.

* * * * *

(7) Goods whose importation is prohibited, and whose entry has been made as lawful goods, shall pay the duty assigned to similar ones, and will have to be exported or rendered useless, as the case may be.

(8) The same goods, of prohibited importation, of which no entry has been made, shall pay three times the duty assigned to similar ones, and will have to be reexported or rendered useless, as the case may be.

(9) The same goods, if they come hidden in a fraudulent manner, as set forth in paragraph 2 of this article, shall pay the penalty of five times the duty of similar merchandise, and shall be treated as provided in paragraphs 7 and 8 of this article.

Extract from paragraph 2.—For the application of the foregoing penalty, fraud shall be understood to be, and punished as such, any preparation which prevents judging at first sight of the quantity and quality of the merchandise.

MONOPOLY OF LIQUORS IN NICARAGUA.

The Government of Nicaragua has decreed "that it is expedient to establish warehouses in the department of Zelaya and district of Siquia for the sale of native spirits (aguardiente) and those assimilating thereto." In other parts of the Republic the sale of aguardiente has been a source of large revenue to the Government, which has a monopoly of its sale. The country is divided into districts, in each of which the exclusive right to sell aguardiente is awarded annually to the highest bidder. Heretofore, the Government has not attempted to exercise this monopoly on the Atlantic coast, and brandies, whiskies, gins, etc., have been imported in large quantities by Bluefields merchants, the import duty per gallon having been but \$1, Nicaraguan currency, or 50 cents United States currency.

An order was issued August 1, 1895, by the inspector-general of the Atlantic coast to the effect that the regulations adopted March 1, 1894, relative to the sale of spirits in Nicaragua should be enforced in Zelaya and Siquia. The reason for such enforcement, as set forth in the preamble, is that "the sale of native and foreign liquors yields no revenue in the department of Zelaya and district of Siquia, there being no regulations in reference thereto." This order was affirmed by a Government decree dated August 23, and on September 6 the regulations in question were, by written proclamation, declared to be in force on the Atlantic coast.

These regulations are not intended to apply to the free port of San Juan del Norte. Goods purchased at San Juan del Norte have always been subject to the payment of duty upon reaching any other district in the Republic. Many dealers along the coast have purchased most of their foreign liquors in San Juan del Norte and the increased duties will naturally destroy much of this trade.

Article 77 of the regulations to be enforced is as follows:

The basis fixed for the collection of the import duty on foreign alcoholic liquors is \$1.50 (Nicaraguan currency) per liter of 50 degrees C. of strength. Spirits of higher alcoholic strength shall pay 3 cents (Nicaraguan currency) for each degree over and above 50.

All packages of rum, which is the only liquor declared to "assimilate to native spirits," must be deposited immediately upon arrival in the nearest spirit warehouse, from which any quantity may be withdrawn at any time upon the payment of duty. The duties on other imported spirits are payable at the time of entry. Wines, ales, and beers are not affected by the regulations and may be imported upon payment of the ordinary duties.

The regulations are voluminous and in some respects complicated. Any person violating the same is liable to five months' imprisonment.

In a community in which the population largely consists of Americans and other foreigners, it would be strange indeed if the protection thus sought

to be given to the manufacture and sale of aguardiente should prove to be popular. That the measure is not popular is evidenced by the following extracts from the Bluefields Recorder:

The execution of these regulations in Bluefields especially will deal a mortal blow to our trade, already in a comatose state. The Government, as it is known, monopolizes the sale of native distilled spirits. As a matter of course, in order to derive revenue from the sale of that article which will never suit the tastes or requirements of the majority of the inhabitants of Bluefields, a prohibitive tariff on imported spirits will be decreed. The result can be foreseen—most of our cafés and restaurants will “shut up shop,” to use a colloquial phrase, and the loss to the revenue by the nonimportation of those spirits which suit the residents of Bluefields will be considerable.

* * * * *

We understand that a memorial will be addressed to President Zelaya, praying that Bluefields be not included within the scope of this decree. The Government can not compel people to consume what is unpalatable to them, and it stands to reason that if a prohibitive tariff is enforced so as to force upon us the acceptance, * * * of the native product, the fisc will be the loser, inasmuch as the native population is not large enough to consume the home article in quantities such as would yield any appreciable profit to the public treasury. * * *

The license fees mentioned in the regulations are required to be paid in addition to the license fees or “commercial taxes” paid into the municipal treasuries.

Upon the promulgation of the Government decree in Bluefields, the retail price of drinks was raised from 30 to 50 cents (Nicaragua currency), but the old price was restored at the end of the second day, as the principal dealers have large stocks of liquors on hand that were purchased prior to the liquor proclamation, and they concluded that higher prices should not be demanded before the exhaustion of their old stocks.

Realty is not taxed in San Juan del Norte. The annual expenses of the municipality amount to about \$24,000. The keeper of each saloon, or *cantina*, is required to pay a license fee of \$50. Other licenses are issued, and all moneys derived from licenses, fines, and certain official services are turned into the city treasury to be applied toward the payment of such annual expenses. The amount so collected is not large, and the greater part of the annual expenses of the town is raised by a tax on personal property. Most of this tax is paid by the merchant importers, the amount to be paid by each being regulated by the ascertained value of his importations, including liquors.

THOMAS O'HARA,
Consul.

SAN JUAN DEL NORTE, *September 27, 1895.*

COMMERCIAL LICENSES IN NICARAGUA.

I transmit herewith a printed copy of an ordinance passed by the municipal council of Bluefields, September 11, 1895, and also a translation of the same. The ordinance relates to the granting of commercial licenses.

THOMAS O'HARA,
Consul.

SAN JUAN DEL NORTE, *October 9, 1895.*

[Translation.]

ORDINANCE NO. 8.

Whereas, it is expedient that the commercial licenses levied by the municipality for the general uses thereof be properly fixed, regulated, and defined.

Be it enacted by the municipal council of Bluefields, by virtue of the authority therein vested—

(1) From and after the promulgation of this ordinance, no business of any kind whatsoever shall be carried on within the limits of the town of Bluefields without a license having been previously obtained from the municipal authorities.

(2) All applications for licenses shall be directed to the municipal secretary, to be submitted to the municipal council, said application to be accompanied by an affidavit signed by two or more responsible residents of the locality or ward where the applicant intends to open a place of business, stating that said applicant is a fit and proper person to carry on business.

(3) All licenses shall be available for twelve calendar months, and shall be taken on the first day of the months of October and April of each year.

(4) The rates of licenses are hereby fixed as per schedule appended to this ordinance, and shall be payable to the municipal treasurer during the first week after which they shall have become due.

(5) Foreigners now engaged in business (Chinamen included) and now residing in this town, shall be granted any of the licenses mentioned in this ordinance, provided they comply with the laws of the Republic and the local regulations having special reference to commercial establishments of any kind.

(6) Any person or persons who shall open any store or shop, café or restaurant, etc., without first obtaining the necessary license from the municipal authorities shall be fined \$25, without prejudice of being compelled to pay the corresponding license.

(7) The owner or proprietor of any store, shop, club, café, or restaurant, or his agent, is bound to prevent the commission of any breach of the peace on such premises, or any attempt that may so be made; and they are bound to comply with the regulations of the service having reference thereto.

(8) The prescriptions contained in the code of police respecting gambling are applicable to all the establishments mentioned in this ordinance.

(9) Any person or persons who shall willfully, feloniously, and with malice aforethought adulterate any article of diet, or any wines, spirits, or other liquors or beverages, and shall offer the same for sale, shall, over and above the penalty imposed by the general laws, be fined \$25 for the first offense and \$50 for the second offense, said license to be at the same time canceled.

(10) The police regulations of this Republic shall in all cases be applied whenever they are not contrary to the disposition of this ordinance.

Schedule of commercial licenses.

<i>First class.</i> —For the sale of merchandise, tobacco, spirits (other than spirituous liquors), provisions, the value of the stock exceeding \$5,000 per annum.....	\$300
<i>Second class.</i> —For the sale of merchandise and provisions, stock not to exceed \$5,000 per annum.....	150
<i>Third class.</i> —For the sale of merchandise as above, stock not to exceed \$3,000.....	100
<i>Fourth class.</i> —For the sale of merchandise, stock not to exceed \$1,000 per annum.....	50
Hotels and restaurants.....	120
Billiard saloons.....	100
Boarding houses.....	60
Tobacco, wholesale or retail, cigars and snuff.....	25
Commercial agents, not to exceed \$5,000.....	100
Peddlers.....	36
Peddlers licenses are to be paid monthly.	

THE NEW SUGAR CROP OF EUROPE.

During the past month, the weather throughout central Europe has been uniformly bright and warm, terminating in a period of intense and unusual heat, which has extended through the first week of September. Although the sugar-beet crop is one which depends largely upon the weather of later September and October, it can be fairly said that, down to the present moment, the season has been exceptionally favorable, and there is, so far as can now be foreseen, every reason to expect a full normal yield, both in quantity and quality, from the entire area which Europe has this year devoted to beet culture.

Just what that area actually is can not yet be precisely stated, but a comparison of the best expert estimates indicates a general and marked reduction of the acreage planted in 1894, with a small decrease in the number of sugar factories. According to a careful estimate prepared from the best attainable information and recently published by the International Association of Sugar Statistics (Association Internationale de Statistique Sucrière), the comparison between factories and beet plantings in 1894 and 1895, in the several sugar-growing states of Europe, will be as follows :

Countries.	Number of factories.		Area planted.		Increase.	Decrease.
	1894.	1895.	1894.	1895.		
			<i>Hectares.</i>	<i>Hectares.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Germany.....	404	395	441,427	370,884	.....	16
Austria-Hungary.....	217	217	376,160	289,430	.....	23
France.....	373	368	236,070	199,244	.....	15.6
Russia.....	227	229	336,363	346,500	3	.....
Belgium.....	111	110	71,365	57,566	.....	19.6
Holland.....	30	30	34,257	32,697	.....	4.5
Other countries.....	45	44	41,000	36,000	.....	12.8
Total.....	1,407	1,393	1,536,642	1,332,321	.....	13.3

Assuming that a good average crop of beets, containing the normal percentage of sugar, will be produced throughout this area, the comparison between the sugar product of the two annual campaigns would be about as follows:

Countries.	1894-95.	1895-96.	Increase.	Decrease.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Germany	1,825,000	1,430,000	.....	395,000
Austria-Hungary	1,050,000	762,000	.....	288,000
France.....	795,000	610,000	.....	185,000
Russia.....	592,000	610,000	18,000	.....
Belgium.....	240,000	205,000	.....	35,000
Holland.....	78,000	78,000	.....	.....
Other countries.....	150,000	120,000	.....	30,000
Total.....	4,730,000	3,815,000	18,000	933,000

	<i>Tons.</i>
1893-94.....	3,895,309
1892-93.....	3,428,515
1891-92.....	3,501,920
Average, 3 years.....	3,608,581

According to the foregoing estimate, therefore, the European sugar crop of the present year will fall 915,000 tons below that of last season, and 593,000 tons below the average of the three years last preceding the phenomenal yield of 1894-95, which by its overabundance prostrated and demoralized the sugar industry and markets of the world.

It will probably be found, however, when the campaign is over and the returns collated, that the above estimate of the present growing crop is too low. There has been, it is true, a more or less important reduction of acreage, but no one who has traveled through the beet-growing districts of Germany this summer and noted the fine condition of the growing plants will readily believe that the sugar product of this season will fall below that of 1891 or 1892. More probably, it will be not far from the mean average of those two years, or about 3,500,000 tons for the whole of Europe.

SUGAR CONSUMPTION IN EUROPEAN COUNTRIES.

There is, perhaps, no economic question concerning which public opinion in this country is more sharply divided than that which concerns the proper treatment of the sugar industry by the national Government. On the one hand, the beet growers and sugar manufacturers insist that since sugar is about the only crop that can now be grown with profit in Germany, it is the duty of the State to continue the bounties on exported sugars and protect its culture against all competition and contingencies. On the other hand, it is asserted that the bounties have stimulated sugar production to a point far beyond its normal limits, and that the proper course now would be to abolish the bounties, reduce or repeal the taxes on sugar consumed at home, and, by thus stimulating local consumption, render the sugar producers less de-

pendent upon exports, in which they must meet and cope with competition for which Germany is by nature unprepared.

As it is, the Germans export about 2 tons of sugar for every ton that is used at home, and while the production has risen from 900,000 to 1,825,000 tons, or more than doubled during the past seven years, the home consumption of sugar has risen only 200,000 tons during the same period, and amounted last year to only 643,000 tons, or 28.8 pounds per capita, against 73.68 pounds per capita in Great Britain and 77 pounds in the United States. In other European countries the case is still worse, the sugar consumption per capita being only 28.8 pounds in Austria-Hungary, 28.41 pounds in France, 22 pounds in Belgium, and 14.61 pounds in European Russia. If the consumption were on the same basis as that of Great Britain, this country would use annually 1,700,000 tons of sugar, and France and Austria each 1,250,000 tons more—a rate of consumption which would quickly exhaust even the phenomenal product of 1894-95, and lift prices beyond the need of bounties or any other artificial form of protection.

The reason for the limited sugar consumption in European countries is mainly its high price, consequent upon the enormous taxes which are levied upon its manufacture when not exported, and which, according to a writer in the Frankfort Zeitung, amount to \$119 per ton in France, \$53.50 in Germany, the same in Austria-Hungary, and \$107 per ton in Belgium, against free sugar in Great Britain and a comparatively nominal import duty in the United States.

It is argued that as a question of revenue simply, a marked reduction of the present taxes on sugar for domestic use would, by reducing its retail price, so increase its use in Germany that the revenues from that source would suffer comparatively little diminution, while the whole industry would be thereby put upon a far more natural and substantial basis, and a luxury which all classes of people are entitled to enjoy would be brought within the reach of millions to whom it is at present practically forbidden. When it is remembered that ordinary granulated sugar sells in Frankfort to-day, after the greatest sugar crop ever harvested, for 7 and 7.5 cents per pound, the effects of high taxes levied on the home supply, to be mainly spent in bounties on exported sugar, will be readily apparent.

FRANK H. MASON,
Consul-General.

FRANKFORT, *September 6, 1895.*

STATISTICS OF GERMAN MINERS.

The following report is based upon a very important work by O. Taeglichsbeck, which was furnished to me by Mr. W. M. Kuhlow, of Berlin.

In Germany, much attention has recently been devoted to the condition of miners, and in several of the mining districts, notably in Saarbrücken and

in the Harz, a special census has, on several occasions, been organized with a view to ascertain the technical, social, and economic condition of the miners. Strange to say, in the most important mining district in the German Empire—that of the Lower Rhine and Westphalia—this has hitherto not been attempted.

In order to supply this deficiency, which has recently been appreciated in many quarters, the royal Prussian mining department of Dortmund decided, in 1893, to collect statistics relating to the coal miners in the district under its control. In carrying out this decision the department was liberally assisted by the Society for Mining Interests, who went so far as to bear the costs of the census and of the publication of the statistics. The mining department bore the cost of the collation of the material collected.

The day selected for the enumeration was December 16, 1893. The census papers comprised 169 questions, and one paper was provided for each miner and official. The papers were filled in by the overmen and examined by the managers. The results obtained have been published, under the editorship of O. Taeglichsbeck, the head of the Dortmund mining department, and the first part of the report, which has just been issued, contains an enormous amount of valuable statistical matter.

Among the 158,368 miners enumerated, there were 59,256, or 37.42 per cent, whose fathers followed the same vocation before them and 23,410, or 14.78 per cent, who came from districts in which German is not spoken. Classified according to religious belief, the miners consisted of 47.91 per cent Protestants, 51.82 per cent Roman Catholics, and 0.27 per cent members of other denominations. Of the number, 30.77 per cent had served in the army, and 97.57 per cent were able to read and write. As many as 16,212, or 10.24 per cent, were house owners, 13,914 living in their own houses. Moreover, 1,976 men possessed land of their own, and 1.1 per cent carried on subsidiary occupations as artisans, inn-keepers, etc.

On the day of the census 8.78 per cent were living in their own houses, 1.61 per cent lived in houses belonging to the mines, 46.83 per cent in tenement houses, 0.62 per cent in common lodging houses, 21.94 per cent with their parents, and 22.22 per cent in lodgings. On an average a house contained three rooms. The number of persons dependent on the miners was 420,552, or 2.66 per head. The number of officials was 4,875, so that there was one official for every 30.99 workmen. Of the miners employed underground, 72,770 were coal getters, 17,840 fillers, and 27,703 putters. Classified by ages, 4.31 per cent were less than 19 years of age, 59.18 per cent were between 20 and 39, and 7.56 per cent were over 49.

For purposes of comparison, reference may be made to the housing of miners in the mining district of Halle, regarding which an elaborate report was also drawn up by Mr. Taeglichsbeck in 1892. In this, he gives the fol-

lowing statement of the nature of the dwellings, and the percentage of the total number of persons:

Description.	Number of men.	Rent free, but rent a part of wages.	Living in their own houses.	Living in rented houses.	Living in barracks.
<i>Workmen.</i>		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Private mines.....	40,372	0.53	21.85	70.11	7.51
Government mines.....	3,274	0.36	27.92	71.14	0.58
<i>Officials.</i>					
Private mines.....	1,196	45.82	17.23	36.95	.....
Government mines.....	122	73.77	9.84	16.39	.....

At the Mansfield mines, which are owned by a prosperous company, no less than 25 per cent of the employees live in their own houses, of which nearly one-fourth have been bought with the help of the company.

H. F. MERRITT,

BARMEN, September 7, 1895.

Consul.

GERMAN IRON AND MACHINES IN RUSSIA.

The exports of German iron and machinery to Russia during the first half of the present year, shows a very favorable development as compared with the like period of the two previous years. This will be seen from the following table:

Exports of iron.

Description.	1895.	1894.	1893.
	<i>Dble. cent.*</i>	<i>Dble. cent.*</i>	<i>Dble. cent.*</i>
Angle iron.....	139,791	87,708	61,671
Bar iron.....	438,450	297,554	197,991
Plates and sheet iron.....	196,837	108,054	84,315
Coarse hardware.....	66,943	49,442	47,085
Total.....	842,021	542,758	391,062

* 1 double or metric centner = 220.46 pounds.

Exports of machines.

Description.	1895.	1894.	1893.
	<i>Dble. cent.</i>	<i>Dble. cent.</i>	<i>Dble. cent.</i>
Locomotives, etc.....	5,216	1,922	1,502
Cast-iron machines.....	112,881	73,961	50,233
Wrought-iron machines.....	13,149	10,240	9,926
Sewing machines.....	6,846	4,895	2,975
Total.....	138,092	91,018	64,636

In the first half of 1895, therefore, the exports both of iron and machines have more than doubled when compared with the corresponding period of

1893; this is true in the case of almost every one of the eight chief articles specified. This result is the more remarkable, as in the first half of 1893 the prohibitive duties on German goods did not yet exist. The German iron and machine trade suffered during that period from the repeatedly increased duties alone, which, however, were levied on the products of all countries alike. In the above-quoted figures, consequently, the improvement of the German export trade, in comparison with the period before the tariff war, shows a large increase.

How large a percentage of Germany's total export in these articles falls to the newly gained Russian market, is shown by the following summary: Angles, 17.7 per cent; bar iron, 30.6 per cent; plates and sheet iron, 35 per cent; coarse hardware, 12.6 per cent; locomotives, etc., 17.6 per cent; cast-iron machines, 25.4 per cent; wrought-iron machines, 18 per cent; sewing machines, 15.7 per cent. As will be seen, in almost all these articles, Russia has become again the most important buyer on the German market.

THEODORE M. STEPHAN,

ANNABERG, *August 7, 1895.*

Consul.

GERMANY AND THE BALKAN COUNTRIES.

Following is a translation of an article taken from the *Deutsche Volkswirtschaftliche Correspondenz*. It shows the interest Germany has in the Balkan countries, and Germany's share in developing these countries. The trade of Germany with them is growing from year to year, and it will be well for our exporters to turn their attention to these new markets, especially so as a direct steamship line has now been established between New York and Odessa, the steamers of which will, no doubt, call at the principal ports on the way, such as Salonica, Burgos, Varna, etc. With this new line established, there is no reason why these countries should not become a good market for American goods:

Though the proceedings in eastern Europe are followed with great attention on the part of Germany, yet the political aspect of the matter is observed more quietly and calmly than is the case in Russia, Austria-Hungary, England, or even in France. It is otherwise with the economic side of the question. As German trade has made great progress in the Balkan states during the last two decades, it can not remain a matter of indifference to Germany whether these acquisitions are disturbed, or, perhaps, utterly lost through revolutionary agitation or political innovations in those countries.

The export of Germany to Eastern Europe is shown in the following figures:

Exported to—	1880.	1890.	1893.
Turkey.....	\$1,596,980	\$8,111,040	\$9,748,480
Roumania.....	2,741,760	12,716,340	10,369,660
Servia.....	171,360	744,940	833,000
Bulgaria.....	35,700	685,440	1,292,300
Greece.....	280,840	887,740	759,220

We have here, therefore, a very favorable increase before us, though in the figures of 1880, the export of Hamburg and Bremen is not included, since these districts did not join the customs union until 1888.

Owing to the geographical position of Germany, overland communication with the states of the Balkan peninsula is only possible by way of other intermediate states, while the sea route round western Europe is very long. To reach the destination by the shortest route, attempts were made by Germany to conclude freight-rate agreements, but without the desired results. The consequence of this was the establishment of the German-Levant line from Hamburg, which has proved itself of great usefulness to the German export to the East.

There is still a third route to the Balkan countries—the Danube line—which was employed in the earliest times. Undoubtedly we are still accustomed to pay too little attention to this important means of communication with the East. The fact that in a short time the difficult work for the removal of the obstacles to navigation at the Iron Gate will be completed, should call our attention again, in a higher degree, to this old historic commercial route, for it is certain that by a more frequent use of the cheap water route, the German trade with the eastern states might be considerably increased. The considerable oversubscription to the loan lately raised in Germany by the Hungarian Government to finance the works at the Iron Gate, shows that the financial men have great confidence in this gigantic undertaking, which is to benefit trade and navigation.

THEO. M. STEPHAN,

Consul.

ANNABERG, *September 7, 1895.*

MUSICAL INSTRUMENTS IN BULGARIA.

Following is a translation of an article which appeared in a recent number of the *Zeitschrift für Instrumentenbau*, and which, I trust, will be of interest to our manufacturers of musical instruments, as it shows the condition of the Bulgarian market:

For about fifteen years the Bulgarian people have been in a state of transition. Before the long-cherished national wishes were fulfilled in 1879 by the establishment of an independent Bulgarian principality, the people groaned under the despotism of the Turks, who managed to extort from the country whatever the industrious and thrifty inhabitants acquired. Since the removal of this burden, the desire of producing and of enjoying has gradually acquired strength. West European views and habits are beginning to spread, and consequently the importance of Bulgaria for the export trade in general, and for the trade in musical instruments in particular, is increasing.

The Bulgarians love music. They sing a great deal, not only at entertainments, but also at their work in the house and in the fields, especially during harvest. The shepherds, or the reapers on the opposite heights, often sing, in alternation, stanza by stanza. The forest, in the dusk of evening especially, inspires the people to sing. On journeys through the country, one often notices at sunset how the travelers, their servants, and the armed escort raise their voices in chorus, as if instinctively, according to an ancient custom, and how men and horses are, as it were, revived by this, even after a long march. Moreover, the Bulgarian troops constantly sing on the march, like the Russians, with whom the singing almost takes the place of drums and trumpets. In the towns, also, the educated classes seldom come together without singing. Every banquet concludes with singing and choral dancing, and the united singing of lyrical melodies, Heyduc songs, and choruses largely takes the place of conversation.

The tunes of the songs are certainly affected by the primitive musical instruments, partly, too, by the nasal chant of the Greek Church, and are monotonous. Under the influence of the new political, economic, and social life, the old primitive songs are beginning to disappear rapidly, which can only be regretted, especially as the new compositions which have taken their place are frequently tame and insignificant. This change, however, is also of advantage, in so far as it is connected with an increased demand for modern musical instruments.

The national instrument—the “gajda,” or bagpipe—predominates throughout Bulgaria. The melancholy and monotonous tones of the bagpipe sound to the Bulgarian far from his home like a voice from the fatherland, and at harvest time singing is heard everywhere, accompanied by the bagpipe. The second national instrument is the “kaval,” an extremely simple wooden shepherd’s pipe, producing a shrill tone. The “gadulka,” or “cigulka,” is a bow instrument with two strings, from which melancholy tones are enticed by means of a bow. The gypsy fiddle, called “kemené,” is a superior instrument. The “bulgarina,” (Turkish “tambura,”) the soft monotonous jingle of which is often heard in private houses and taverns, is a small guitar with four strings, which are played upon by means of a goose quill, without vocal accompaniment. The Mohammedan Bulgarians of the Rhodope accompany their songs with a similar guitar, played with the fingers. This is called “drukja” or “bajlama.” All the instruments are manufactured by the “gajdari,” who formerly constituted, in the towns, a special guild.

It is only of late years that musical instruments have been imported in considerable quantities from abroad. According to Bulgarian statistics, pianos weighing 21,800 kilograms, to the value of 54,000 francs, were imported in the year 1891; in 1894, however, 32,000 kilograms, to the value of 78,000 francs. In other musical instruments, 9,600 kilograms, to the value of 54,700 francs, were imported in 1891, and in 1894, 15,800 kilograms, to the value of 89,000 francs. The increase in these three years is quite considerable, from 109,000 francs to 167,000 francs. German-made pianos are most approved of. In 1891, Germany supplied them to the amount of 26,000 francs; in 1894, to 47,000 francs. From Austria-Hungary, pianos were supplied to the value of 20,000 and 27,000 francs, and from France, to the value of 3,000 and 2,000 francs, in the respective years. In other instruments, however, Austria has apparently the lion’s share in the market; but it is probable that among the goods ascribed to Austria there were many of German manufacture, which were first exported to Austria and afterwards sent on to Bulgaria. The import from Austria amounted in 1891 to 25,000 francs; in 1894, to 48,000 francs, while Germany supplied only to the amount of 12,000 and 30,000 francs, respectively. France stands here also far behind, with 4,000 and 5,000 francs, respectively.

The duty, since the commencement of the present year, amounts to 10½ per cent of the value. Up to that time only 8½ per cent was collected. The new rate remains in force for two years, when, very likely, another increase will be made. The Government has already tried to raise the duty to 15 per cent, but the attempt failed, owing to the opposition of the powers, on the ground of a clause in the Berlin treaty, according to which every alteration in the existing commercial relations is dependent upon the consent of the great powers. The value which determines the duty is estimated by the price prevailing at the place of destination, after deducting 10 per cent.

THEODORE M. STEPHAN,
Consul.

ANNABERG, *August 29, 1895.*

NAVAL EXHIBITION AT KIEL.

Referring to my report of July 12, 1895, upon the International Naval Exhibition to be held at Kiel next year,* I have the honor to transmit herewith an English copy of the official programme of the exhibition, which contains full information for intending exhibitors. I would beg to repeat that all inquiries for information should be addressed to the "Committee of the Exhibition, 1896, at Kiel."

W. HENRY ROBERTSON,
Consul.

HAMBURG, *September 21, 1895.*

INTERNATIONAL EXHIBITION FOR NAVIGATION AND FISHERY, KIEL, 1896.

DEAR SIR: We have the honor of handing you inclosed the programme, the classification of groups, and all other documents relating to our exhibition, trusting that you will decide upon partaking in our enterprise.

All preparatory steps are in full progress, and there is every reason to believe that, favored by numerous exhibitors and eminently interesting displays, our exhibition will find the interest of the widest circles, so that we may well expect a full success for all concerned.

The board of directors:

FUSS,
First Mayor of the city of Kiel, Honorary President.
SARTORI,
Geheimer Commerzienrath, I President.
VON BREMEN,
II President.

KIEL, *August, 1895.*

INTERNATIONAL EXHIBITION FOR NAVIGATION AND FISHERY, KIEL, 1896.

The totally unexpected development which the international trade and traveling has undergone during the last twenty-five years, may be attributed in an important degree to the mighty progress of ship construction and the steady improvement of all mechanical and nautical institutions.

All seagoing nations are indefatigably busy to increase their commercial fleets, to facilitate and extend their interoceanic relations, and to improve the comfort and speed of their steamers for the passenger service.

Every year the everlasting impetus of human genius produces new inventions in all branches of navigation, destined to bring the interoceanic traffic to the highest perfection.

Up to the last year it seemed that navigation by sailing vessels was to go out of use; presently, the building of giant sailing vessels of enormous capacity for transport is again in the foreground. There is hardly a branch of human work where people to the same extent endeavor to meet the requirements which the increasing trade and the sharp competition are imposing upon them as shipbuilding and nautical construction.

However, this is a matter of fact not only for the fleets for trade and passengers; the same restless hard working for perfection is to be noticed among all the leading nations with the fleets of war ships, who, in the first line, have the destination to protect international trade.

The magnificent parade of men-of-war who came to a friendly and peaceful gathering in our harbor on the occasion of the opening of the Kaiser-Wilhelm Canal in June last, gave an opportunity to witness how great the revolution has been in the last decades in the construction of floating defenses.

Hand in hand with the progress of navigation and shipbuilding for the sea, all institutions, such as the perfection of coast lighting, life and ship saving arrangements, etc., show the same improvements.

In the same manner, all prominent states are devoting their attention to the increase of the inland canals and to the conjunction of the natural river systems, and for these purposes they are spending important sums every year. In this department, technical knowledge is likewise making fast progress, directed by the conviction that the extension of the continental river systems, from an economical point of view, can not fail to prove a mighty impulse for national welfare.

We feel assured that, with a view to these facts, it will be considered as an enterprise in accordance with the spirit of the age that we have resolved upon creating an International Naval Exhibition at Kiel in 1896, and we trust that, by the participation of all seafaring nations, this exhibition will give a complete and true picture of the present standing of navigation, together with an historical review of the development and progress of shipbuilding and all industrial branches connected with it.

Kiel, the most prominent harbor for the German navy, seems to be particularly destined for the seat of an international naval exhibition; no other port can be considered equally fit for such purpose. The vast and imposing bay will form the picturesque frame for the exhibition. The ground destined for the same is situated on a gently sloping hill in close neighborhood to the city of Kiel and the entrance of the canal near Holtenau. To a wide extension its shores are washed by the waves of the Baltic Sea. Here is sufficient space for safe anchoring of vessels of all kinds and for interesting maneuvers and display connected with nautical life. The exhibition is to take place from end of May until the last of September, 1896.

In close relation with general navigation is the fishery, which always has taken a prominent place in economical life; particularly in Germany, it has long been the intention of the Government to fructify to a higher degree the riches of the deep sea for the nourishment of the people. * * * Consequently we have the intention to combine with the International Naval Exhibition an International Fishery Exhibition, and we feel assured that this section will not form the least interesting part of our exhibition.

Both these exhibitions will be held in connection with an industrial exhibition of the Province of Schleswig-Holstein.

The Imperial German Government has expressed its readiness to lend a strong support to our enterprise.

We venture to hope that our scheme will meet with a sympathetic approval in the widest circles, and that we may rely for the success of our plan upon the energetic cooperation of all those who are taking a lively interest in the development of the navy and fishery.

SARTORI,

Geheimer Commerzienrath, President.

L. VON BREMEN,

II President.

KIEL, August, 1895.

PROGRAMME.

SECTION I. The International Exhibition for Navigation and Fishery at Kiel, 1896, is intended to give a true picture of the present standing of shipbuilding and navigation and of the progress which machinery has made in all the different branches connected with nautical purposes.

In presence of the mighty revolutions and inventions which have been the result of the past decades, a naval exhibition, in which all seagoing nations are represented, will give a highly interesting display of modern technical knowledge. Vessels and their models, drawings, sketches, and photographs will serve for that purpose, and in connection with this there will be a show of the development of shipbuilding from its origin up to present times. Furthermore, and in connection with the above, an International Fishery Exhibition is to be held.

The board of directors, trusting that the exhibition will be favored by participation from numerous exhibitors all over the world, have the honor of inviting you particularly, and recommend to make your application for space in due time. The board of directors reserve for themselves the right of deciding about the admission of the exhibits, and, in case of need, about the reduction of the space claimed.

SEC. 2. Applications for space (for which please use the annexed schedules) must be effected before December 1, 1895.

SEC. 3. The exhibition will be opened on Wednesday, May 13, 1896, and closed on September 30, 1896.

SEC. 4. The delivery of the objects may begin on April 1, 1896; in every case it must be effectuated so early that also the decoration may be completed on May 1, 1896. Exhibits belonging to various groups must not be packed together in one package. Each package is to be marked on three sides distinctly with exhibitor's name and the number of application. If required, the board of directors will take care for storage of the empty cases at exhibitor's expense.

SEC. 5. For rent of the required space, see special tariff.

SEC. 6. For the decoration of the buildings on the outside and in the interior the board of directors will take care. Decoration of the space respecting separate rooms for one or a number of exhibitors jointly, exhibitors have to provide for themselves. The board of directors have to decide about the intended arrangements.

According to the tariff, the board of directors furnish merely space on the floor, the walls, and on tables, but no screens, show-cases, etc., of any description. Exhibitors have to provide for the latter at their own expense.

For the sake of an harmonious arrangement, exhibitors are requested to forward a sketch of such show cases to the directors for approval.

SEC. 7. Big advertisements on wood, metal, or flags, etc., may only be applied with permission of the directors.

SEC. 8. All exhibits must be delivered into the exhibition free of any charges at exhibitor's cost. Exhibitors will receive a receipt stating the number of packages delivered. The opening and unpacking of the packages, as well as the arrangement of the exhibits, is the exhibitor's business, who has to follow the rules and regulations issued by the directors. Only against the return of the receipt may the exhibits be taken away at the close of the exhibition. In case exhibitors themselves should not be in a position of providing for the above, the board of directors are prepared to name such firms who have expressed their willingness to execute such work at fixed rates for exhibitors account. The cleaning of the exhibits is likewise the exhibitors' business; in case they do not provide for it in the proper way, the board of directors will give instructions to have the exhibits cleaned at the exhibitors' risk and expense. The transport of all exhibits from the cars or steamships into the exhibition grounds must be effected by that firm, with which the directors have made special arrangements at fixed rates.

SEC. 9. The board of directors, as far as possible, will take care for sufficient guards in order to protect exhibits against burglary and damages. They decline, however, any guaranty or responsibility for losses.

SEC. 10. In delivering the exhibits, exhibitors have to state whether the latter are for sale. If so, the objects must be provided with a ticket "Verkäuflich," or "for sale."

SEC. 11. The board of directors will cover an insurance policy against fire. Exhibitors have to pay the respective premium upon the declared value of their exhibits. If exhibitors

do not give precise instructions for insurance, the board of directors will not provide for the same.

SEC. 12. If required, the board of directors will furnish power by steam or by electricity at the rates of a special tariff.

SEC. 13. Every exhibitor is allowed a ticket of free admission for himself and his representative. Admission at reduced prices may be allowed by the directors to the laborers of exhibitors.

SEC. 14. Exhibitors are not allowed to remove any of their exhibits before the close of the exhibition. All exhibits must have been removed from the grounds within twenty days after the closing day. The objects will be delivered against handing back of the receipt (section 8) and payment of all charges. In case the exhibits are not removed in due time, they will be handed over, at exhibitor's cost and risk, to the forwarding firm.

SEC. 15. There will be awards and premiums for excellence and superiority of exhibits.

SEC. 16. According to special classification, all exhibits are divided into special groups.

SEC. 17. All differences are to be settled by the board of directors. Alterations and additional stipulations reserved.

The board of directors:

FUSS,

First Mayor of the city of Kiel, Honorary President.

SARTORI,

Geheimer Commerzienrath, I President.

VON BREMEN,

II President.

KIEL, August, 1895.

CLASSIFICATION.

A.—Navigation at sea.

Group 1.—Sea and coasting sailing-vessels, in construction, models, and drawings, (a) of the present time, (b) of past times, to show the historical development of shipbuilding and navigation.

Group 2.—Paddle and screw steamers in construction, models, and drawings.

Group 3.—Motor boats of every description in construction, models, and drawings.

Group 4.—Race cutters, sailing yachts, etc., in construction, models, and drawings.

Group 5.—Implements and installations for vessels of every description; masts, sails, rigging, anchors, chains, etc.

Group 6.—Engines, boilers, and appurtenances, in construction, models, and drawings; furnaces, fire boxes, pump works, and appurtenances.

Group 7.—Construction of vessels, models, and drawings; newest constructive details, longitudinal and traverse stays; arrangement of the engines with regard to vibration; water-tight compartments.

Group 8.—Propellers in construction, models, and drawings; paddle wheels, screws, twin screws, and other systems; propelling by direct action of water or piston, etc.

Group 9.—Coals and other material for firing.

Group 10.—Nautical instruments, compasses, sextants, steering apparatus, alarm signals, sirens, ship lanterns, electrical installations of all descriptions.

Group 11.—Lighthouses, rackets, lifeboats, saving of wrecked vessels, etc., and similar apparatus.

Group 12.—Approvisions; baking ovens, filter apparatus for drinking water, conserves of meat, ice machines, cabooses, etc.

Group 13.—Outfitting of the cabins and saloons; bedding, hammocks, lights, ventilators, refrigerators.

Group 14.—Equipment of the crew; clothing, pantry, weapons, etc.

Group 15.—Hygiene on board, airing, heating arrangements, pharmacy, chirurgery.

Group 16.—Installations for maneuvering the sails, for charging and discharging the cargo; cranes, winches, installation for coaling on sea.

Group 17.—Materials for ship's outfitting; wood, iron, steel, tin plate, plates for iron-clads, copper sheeting, hemp, linen, cotton, canvas, rope, paint, etc.

Group 18.—Marine literature, marine paintings, charts, statistics; results of the scientific researches of the sea; meteorological observations.

B.—Navigation on rivers, etc.

Group 19.—River steamers, tugs, ferry boats, ice breakers, steamers for wreck raising in construction, models, and drawings; warehouses, silos, installations for charging and discharging the cargo, etc.

Group 20.—Models and drawings of harbors, wharfs, docks, pontoons, sluices, corrections of rivers, etc.

C.—Fishery.

Group 21.—Sailing vessels and steamers for fishing on open sea, in construction, models, and drawings.

Group 22.—Equipment, outfit, apparatus, and implements for whale and seal hunting, and for fishing of all sorts.

Group 23.—Fishery on the coast; vessels for that purpose in construction, models, and drawings; outfitting, nets, and other apparatus for fishing.

Group 24.—Fishing in the river and on lakes; angling roots, nets, etc.

Group 25.—Salted and conserved fishes for nourishment; smoked fish, utilization of fish residues.

Group 26.—Fisher huts, dresses and equipment of the fishers.

Group 27.—Aquariums.

TARIFF OF THE RENT FOR SPACE.

The rent for space will be charged as follows:

	Marks.
In entirely closed rooms:	
1 square meter, ground floor.....	15
1 square meter, on the walls.....	12
In open halls:	
1 square meter, ground floor.....	8
1 square meter, on the walls.....	8
In the open grounds.....	5
For space on tables (rough boards) furnished by the exhibition, in addition, per square meter	3

If merely space on the walls is required, there will be charged space for ground floor in addition at the rate of one meter width for the whole respective length. If space is required both for the ground floor and on the walls, nothing will be charged for one meter space on the walls from the bottom. If compartments are required, the space of the ground floor alone will be charged for; exhibitor, however, has to provide for the side walls.

Exhibitor has a right to claim a passage for the whole length of his exhibit. For any further passage bordering his space he will be charged for half of the respective width of the passage, according to its length. In any case, there shall not be charged more than one meter width.

Half of the amount for rent, together with any other expenses, are to be paid as soon as exhibitor has been informed of the granting of his application. If any firm should withdraw its application, it is not allowed to claim that the rent already paid should be refunded. The

balance of the rent due, etc., must be paid before the exhibits are brought into the exhibition grounds.

To public institutions of the Government, municipalities, etc., public schools and lyceums, special reductions of the tariff will be granted. The same reduction will be allowed in favor of exhibits of women's work and domestic industry.

The board of directors are entitled to dispose elsewhere of any space granted to applicants, if the space is not taken possession of at the opening of the exhibition. In such cases the rent, which has been paid, is forfeited.

DAMAGE TO BAVARIAN FORESTS BY CATERPILLARS.

The fir forests of Middle Franconia, in the Kingdom of Bavaria, have, in the last two or three years, been subjected to an attack by an insect which has caused a destruction of valuable timber covering an area of 8,413 acres, and a large force of men which I have seen estimated at 3,000, is now engaged in clearing this extensive tract.

The insect which is doing so much damage is technically known as the *Fidonia piniaria*. It is a butterfly, and belongs to the species *Geometridæ*, whose wings, when extended, measure 1.38 inches. The male has double comb-like feelers, wings of a black brown color, and large, clearly defined spots of a white yellowish character at the base. The female has thread-shaped feelers and red-brown wings, the center of the wings being of a lighter tint than the rest. The bodies of both male and female underneath are of a brownish hue, with dark lines running across, dotted with numerous dark, sometimes white spots. A white strip runs along the entire length of the hind wings. The time for flying is chiefly in the month of June, and the males at daylight swarm in great numbers around the crowns of the trees.

The fir is the tree usually attacked, and it is but rarely found upon the German *Fichte*, or pine.

The butterfly deposits its eggs upon the needles of the trees in rows; about the middle of July, the caterpillar is hatched. It is of a light color, with green stripes and ten legs. From the end of September until November, they drop to the ground for the purpose of changing into a chrysalis, in which state they pass the winter.

The damage done is accomplished between the time of hatching and the time at which the caterpillar drops to the ground, and it is discernable by a brown discoloration so soon as the last of July or first of August. They appear to gnaw at the needles, sapping their vitality, and by the end of autumn the tree is entirely stripped of them.

Formerly, these attacks did not appear to injure the tree to any extent, and did not deprive it of sufficient strength to thoroughly form its buds and give them enough sustenance to put forth healthy shoots the following spring.

It is well here to note that this insect and its habits have long been known, but its dangerous qualities have only been developed in the last few years.

The mischief accomplished at the present time is supposed to be owing to the abnormal multiplication of this insect in consequence of the very dry and hot summers of 1892 and 1893, and the inability of its natural enemies, the ichneumon fly, common fly, parasitical mushroom, etc., to destroy it.

Trees which contain a small quantity of eggs, and which are not attacked before October or November, generally survive.

No effectual remedy for the annihilation of this pest when it exists as an egg or caterpillar has been found. Good, however, is said to have resulted from permitting swine to run at large in the forests at the time the chrysalis is upon the ground. The country people express the opinion that a removal of the litter would take away the bed in which the chrysalis accomplishes its transformation; but scientific experiment demonstrates that this transformation does not occur in the litter, but in the humus, and to some extent even in the mineral soil, and it would be necessary in order to destroy them in this way to remove all the earth so far as the mineral stratum.

Such a remedy would prove as destructive as the disease, as the roots of the trees would, by such a process, be so severely injured that they would be unable to survive the treatment.

Piling the litter in large quantities in order to create heat for the purpose of killing the pupa was tried, as well as smearing the trunks of the trees with lime, and sprinkling the crowns with antinonin, but no good resulted from these experiments.

As no remedy tested proved to be sufficiently effective to destroy this pest, the royal forestry administration has determined to let nature take its course, as experience has demonstrated that such evils die out in the third year. By that time the natural enemies of this insect will have so increased that they will be able to control its power to do great damage.

This insect is not peculiar to this part of the country, but is to be found elsewhere in Bavaria and Germany; its excessive destructiveness, however, appears to have developed only in the district of Middle Franconia, in the neighborhood of Nuremberg.

WM. J. BLACK,
Consul.

NUREMBERG, *August 31, 1895.*

NOTES.

Hygienic Exposition of Warsaw.—Consul Rawicz writes from Warsaw, October 15, 1895:

The second Hygienic Exposition of Warsaw will be held in the city of Warsaw, Poland, during the year 1896. The exposition will be opened on the 15th of May, and will close on the 15th of July. The first hygienic exposition in Poland was in the year 1887, and, judging from the success which the undertaking met with at that time, and taking into consideration the interest shown at present among medical men and the public at large in hygiene, the usefulness of the new exposition would seem to be assured. At present there are nine committees at work: (1) Physico-chemical, (2) parasital, (3) architectural, (4) pedagogical, (5) on hygiene of industry, (6) on hospitals, (7) pharmaceutical, (8) statistical, and (9) public hygiene. The several committees have been assigned the following subjects:

(1) The committee on physico-chemistry will take into consideration (*a*) air, water, light; (*b*) food in general; and (*c*) articles connected with the above, as kitchen utensils, paints, wall paper, and poisonous vegetables.

(2) The parasital committee, the question of sterilization; also, the utensils used for the culture of bacilli, showing exhaustively the method of ascertaining their presence and the means for their destruction.

(3) The architectural committee, human dwellings in general, past and present, and the latest improvements in hygienic building.

(4) The pedagogical committee, the hygienic mode of caring for children; construction of school houses; all systems of school education, and schoolrooms and furniture.

(5) The committee on hygiene of industry, the hygienic conditions prevailing in the homes of laborers, shops, and factories; also, food and drink and vital statistics.

(6) The committee on hospitals, the history and statistics of hygiene and the modern hospitals of the world.

(7) The pharmaceutical committee, the literature and history of pharmacy, patent medicines, furniture, medical implements, and all pharmaceutical utensils.

(8) The committee on statistics, the blanks, plans, diagrams, drawings, books, and all printed matter on the subject of hygiene, meteorology, geology, hydrography, and anthropology in all their details and all sciences connected therewith; also, to provide a series of lectures and reports on its work.

(9) The committee on public hygiene, the manner of living, dwellings, etc., of all classes of the population from a sanitary point of view.

Each of the above committees is composed of at least three members selected from among the doctors of medicine, professors, engineers, and other specialists under the presidency of the general committee, composed as follows: Professor Brodewski, president; Professor Przewski, vice-president; Professor Proicke, and Engineers Grotowski and Mascicki, members; and M. Polak, M. D., secretary.

Awards of gold, silver, and bronze medals will be made; also, diplomas and letters of honor.

Bills of Lading for Cuba.—Consul-General Williams writes from Habana, October 23, 1895: I inclose for the information of American exporters,

shipmasters, and shipowners, the translation of an order issued on the 18th instant by the intendant-general against the usage of vague terms in bills of lading and manifests of vessels clearing at foreign ports for the island of Cuba, fixing the 1st of December next as the date after which fines ranging from \$10 to \$100 will be imposed on all masters of vessels who present the manifests of their cargoes expressed in vague instead of specific terms.

[Translation.]

INTENDANCY-GENERAL OF FINANCE,

Habana, October 18, 1895.

In view of the remonstrances presented by several consignees against the fines imposed by the custom-house of this port on the masters of vessels for using vague terms in the manifestation of their cargoes, as also of the royal order No. 1,345, of May 31 last declaring that the words "hardware, hewed timber," and others of equal vagueness are not admissible in the manifests of vessels entering Cuban ports; and it being inferable that shipmasters and the consuls of Spain in foreign ports upon whom it is, respectively, incumbent to make out and to certify the manifests of vessels bound to the ports of Cuba, have neglected to correct such deficiencies, as required by the provisions of paragraph 3 of article 40 of the customs regulations of this island, which impose fines in such cases under paragraph 2 of article 149 of the same regulations; and considering the execution of the aforementioned prohibition as important for the protection of the customs revenues of this island, because preventive of the preparation of frauds abroad on the said revenues, and this measure being in no way injurious to honest commerce, and taking into account with the view of favoring it, the circumstance that up to the present time the customs authorities have not considered themselves empowered to consider such omissions as subject to penalty; and this fact having led the masters of vessels to admit bills of lading vaguely worded, and the consuls of Spain to certify the manifests made in accordance with them, consequently, on now declaring the true meaning of this part of the customs regulations, equity counsels the fixing of a prudential term for its execution. Therefore, I hereby order, saving the decision of the Minister of the Colonies, that masters of vessels must not admit bills of lading nor consuls certify to manifests expressing the class and kind of merchandise with the words "hardware, hewed timber, fancy goods, flour," (without expressing place of manufacture) and "dry goods" (without expressing if of cotton, linen, etc.), and other notoriously vague terms, and that these faults will be punished by fines from the 1st of December next ranging from \$10 to \$100.

The above is ordered to be published in the Official Gazette for the information of the public.

M. CABEZAS,
Intendant-General.

Mackerel Fishing Off the Irish Coast.—Consul Ashby writes from Dublin, October 21, 1895: I inclose herewith an account of the wonderful results attendant upon mackerel fishing off the Irish coast. As these fish are largely consumed in our markets, I thought the report of possible interest. It is taken from the Irish Times (Dublin), of this morning (October 21).

[Extracts.]

In the annals of fishing—of fishing in Irish waters, at any rate—nothing is more remarkable than the continued success of the autumn mackerel fishing this season off the south and southwest coast of Ireland, and perhaps a few details respecting this industry and the twin industry of mackerel curing for the American markets may be of some public interest just now.

Since the commencement of the autumn fishing season, some seven or eight weeks ago, immense hauls of mackerel, herrings, hake, and other fish have been made in the waters off the coast of Cork and Kerry by the large fleets of boats that ply from different stations along the seaboard of those two counties, and the really enormous supplies of fish, especially mackerel, landed by the fishermen show undoubtedly that these waters have been teeming with fish this autumn.

The fishing fleets in these waters have indeed been reaping a most prolific and bountiful harvest, and the business of fish curing so extensively followed in Cork and Kerry this autumn has been in a most prosperous and flourishing condition. In fact, the season may be said to be a record one, far exceeding the expectations of the fishermen and fish curers alike.

Beyond doubt the fish curers from Scotland and England, including over half a dozen prominent Liverpool firms who came over to Cork and Kerry toward the end of August have ever since done a brisk, lively, and profitable business at curing Irish mackerel for the American markets. Fish curing depots at all the available centers along the seaboard of these two counties were established and equipped for carrying on the curing operations on an extensive scale in anticipation of a successful autumn fishing season, and certainly a more prosperous season for these two industries—fishing and fish curing—has never been experienced in the south and southwest of Ireland.

At intervals, indeed, the curers have been simply overpowered with work, owing to the great quantities of fish landed, and some of them have been almost at their wits end to cope expeditiously with the enormous piles of mackerel that awaited treatment at the hands of their large staffs of employees. From time to time a great strain has in this way been thrown on the curing firms, and at a pinch all available labor in some of the curing districts has been requisitioned and pressed into the service of the curers to tide over the glut occasioned by the overabundant hauls of fish. In this way numbers of men, women, boys, and girls were employed as extra hands at good wages at several fish-curing depots along the coasts of Cork and Kerry. The fish-curing industry this autumn has afforded a great deal of good constant employment in these counties at very remunerative rates of payment, thanks to the success of the autumn mackerel fishing.

The season is likely to continue just as successful for some weeks to come. The past week has been a remarkably successful one, especially off the Kerry coast. In Dingle Bay no less than 100,000 mackerel were taken a few nights ago, and this splendid lot of fish—the like of which has scarcely ever been seen—was quickly bought up by the local fish curers at prices ranging from 14s. to 17s. per 120 fish. At a rough estimate the enormous take of mackerel realized in cash to the fishermen close on £8,000—an item which conveys some idea of what the autumn fishing is like, and its value as an industry. But that is not all; to cure this pile of fish, though distributed among several curers, afforded a large share of local employment and the engagement of extra hands, necessitating the further expenditure in the district of several hundreds of pounds. Mackerel being such a perishable commodity when landed in such very heavy quantities must be immediately attended to by the curers, and to handle this enormous quantity of fish, representing tons of valuable food supply, kept the different staffs of employees busily occupied far into the night.

During the past week, too, mackerel fishing off Kinsale has been very successful. The fleets that ply from that station were particularly fortunate in coming in contact with large shoals of mackerel in grand condition, and large and valuable hauls have been the result. To give an idea of what has been done at Kinsale, it may be mentioned that on one morning last week five of the Kinsale boats landed 32,000 mackerel. These were sold at Kinsale at from 11s. to 13s per 120 fish, which means that those five boats between them earned £160 in one night's fishing, and these particular boats only form part of the fleet. Some of the other boats have been earning from £15 to £20 per night for several nights at a stretch. In consequence of the abundance of the mackerel supply at Kinsale, the curing staffs have been working night and day for the best part of a week. Kinsale is a very important fishing and curing station, and Messrs. Duncan & Co., Liverpool, Mr. H. Flynn, Liverpool, Mr. J.

Rigby, and Messrs. Robertson & Co., have curing depots there, which afford a large amount of local employment, so much indeed, that the industry has been most beneficial to the town, which now wears an air of activity and business, superseding its wonted dullness. This autumn at Kinsale, as at other spots along the coast of Cork and Kerry, the captures of mackerel have been simply phenomenal, and the fish curers from across the Channel have received most extraordinary encouragement in their laudable enterprise of curing Irish mackerel for foreign markets.

Lime Industry in Bermuda.—Commercial Agent Willett writes from Saint George's, Bermuda, October 31, 1895:

I inclose herewith a clipping from the Bermuda Colonist, of October 30, 1895, containing the Bermuda Lime Company's prospectus, a new industry for these islands, about being established.

The newspaper extract states that Capt. Mark Golinsky has started another company which is to engage in the exportation of Bermuda stone to New York, where it is to be burned and converted into lime. It will only require a capital of £3,000 to start the enterprise.

Lime, says the prospectus, will sell almost at any time at New York if we put the price down to 65 cents per barrel. Therefore 20,000 barrels at 65 cents per barrel would realize per month the sum of \$13,000, the company's estimated expense account per month being \$11,831. The company's clear profit on £3,000 capital would be * * * \$14,021 per year.

Refund of Duties by Brazil.—In a dispatch to the Department of State dated Petropolis, October 7, 1895, Minister Thompson says: Referring to my No. 415 of October 3, reporting that the National Congress had passed a resolution authorizing the refund of the duties illegally collected on American merchandise in contravention of the commercial arrangement, I have the honor to transmit copy and translation of a note from the Minister for Foreign Affairs, formally notifying me of that fact.

[Translation.]

DEPARTMENT FOR FOREIGN AFFAIRS,

Rio de Janeiro, October 3, 1895.

I have the honor to communicate to Mr. Thomas L. Thompson, envoy extraordinary and minister plenipotentiary of the United States of America, that the President of the Republic has sanctioned a decree of the National Congress authorizing the opening of a supplementary credit of the sum of 1,700\$000 (\$928,200) to the verba *Reposicoes restituicoes* of the current fiscal year, article 7 of law No. 266 of December 24, 1894. As Mr. Thompson will see from the inclosed clipping from the *Diario Official* of yesterday, which contains that decree, the necessary authorization is given for the restitution of the *expediente* duties collected by the custom-houses upon American merchandise, which should have been admitted free under the respective commercial arrangement.

I renew, etc.,

CARLOS DE CARVALHO.

Coffee Crop of Colombia.—In a dispatch from Barranquilla, October 27, 1895, Consul Bidlake says:

Colombia has this year an immense crop of coffee, and of a good quality. In the department of Tolima, the crop is the largest ever grown, and of a superior grade. Santander has

also a fine crop, but not of as good a quality. In the warehouses at Giradot, there are 40,000 sacks of coffee, and at Yeguas, 14,000 sacks awaiting shipment to the coast. It is estimated that there are yet 200,000 sacks of coffee for exportation. Exchange is falling rapidly, and bills are being sold at 150 per cent for dollars.

Danish Proclamation as to Export of Cattle.—Consul Kirk reports from Copenhagen October 26, 1895: Inclosed is a proclamation and translation from the Minister of the Interior concerning the export of cattle, sheep, goats, and hogs to foreign countries.

[Translation.]

The proclamation of the Minister of Interior concerning the export of cattle, sheep, goats, and hogs to foreign countries, of the 27th of September, 1893, is hereby canceled, inasmuch as the provisions contained in section 5 of the proclamation of the Minister of Interior of the 10th of November, 1892, concerning the said matters, is again made of force and effect.

As a consequence thereof, the provisions contained in the last-named proclamation must be observed with respect to the export of the said domestic animals from this country to foreign countries, provided, however, that as no part of this country is for the present declared quarantined on account of the foot-and-mouth disease, there will be no necessity to require the certificate of origin at the presentation of the animals for veterinary examination, as provided in section 5.

This ordinance goes into effect immediately.

Italian Commercial Museum in Paris.—Consul-General Jones writes from Rome, October 21, 1895:

Leading Italian manufacturers have made arrangements to open, in January, 1896, a commercial museum in Paris, where samples of all goods that Italy produces for export will be placed on exhibition. Not only will Italian products be advertised in this museum, but—and this is the practical side of the institution—the directors will send out on the Paris market competent salesmen who will visit, samples in hand, the French exporting houses. These firms will, in turn, distribute Italian products in those countries with which they do business. The Italian press predicts happy results from this new departure. Allusion is made to the subject because of the number of letters received at this consulate-general within the last few months from manufacturers and exporters in the United States, evincing a desire to extend our trade with Europe. It may not be amiss to repeat that trade with Italy can not be established by correspondence and circulars alone. Merchants here are reached only by personal solicitation. To compete with England and Germany, we must do as they do. There are a great many English and German residents in Italy engaged in trade, but no Americans. The English depend chiefly on the established English houses. The German manufacturers send representatives to all the chief cities and canvass thoroughly every part of Italy.

Indian Corn in Italy.—Under date of October 17, 1895, Consul-General Jones writes from Rome:

The attention of shippers of indian corn from the United States to Italy is called to a recent decree of the Italian Government, supplemented yesterday by a circular from the Min-

istry of the Interior, prescribing that, in future, shipments of indian corn to Italy from foreign countries must be accompanied by a consular certificate attesting that the corn shipped is of good quality, neither sour nor damaged, and sufficiently dry not to spoil during the voyage. If, upon arrival, it shall be found that a portion of the cargo has become damaged from any accidental cause, that portion shall be sent to the distillers and there utilized under the supervision of treasury officials.

Italian Savings Banks.—In a dispatch dated October 18, 1895, Consul-General Jones says:

(On December 31, 1894, the total deposits in the Italian savings banks reached the sum of 1,306,919,314 francs (\$252,215,427). At the same date, the deposits in the post-office saving department amounted to 411,734,259 francs (\$79,464,712). Adding these amounts together, we get the sum of \$331,680,139. If to this sum be added the savings deposited with the "institutions of credit" and the "people's banks," which can be estimated at \$80,000,000, the total savings of the Italian people reaches the important sum of over \$400,000,000—figures which attest the sobriety and spirit of economy that pervade the Italian working classes.

Phylloxera in Italy.—Consul Seymour writes from Palermo, October 15, 1895:

According to information at hand, the phylloxera has struck twenty-six provinces in Italy. Of the provinces of continental Italy, only the Venetian and those of the South Mediterranean region are free. It has destroyed already vineyards aggregating 285,845 acres, and it is estimated that other vineyards aggregating 188,345 acres are on the way to destruction. Sicily has suffered most; following, Sardinia, Calabria, Isle of Elba, Livuria, etc. The director-general of agriculture, who has made researches concerning the consequences of the damage done in Sicily by this infection, estimates that the 240,000 acres destroyed in Sicily required, before the infection, nearly fifteen million workdays, which procured to the workmen about \$4,000,000. It is estimated that, in the cultivation of wheat, this would require only one-fourth the workdays, depriving the laborers of about \$3,000,000 and lacking \$5,000,000 of paying the proprietors as much as would the vines.

The damage done in Sicily by phylloxera during the last three years is estimated from \$30,000,000 to \$40,000,000. The infection is spreading. In many places where there is not phylloxera there is *peronospora*.

Orange and Lemon Crop in Southern Italy.—Consul Dean writes from Naples, October 7, 1895:

The Island of Sicily is the most productive center of southern Italy of oranges and lemons. The exportation of these fruits to the United States from the Bay of Naples is wholly from Castellamare di Stabia and Sorrento. After Sicily in productiveness come Rodi, the Sorrentine peninsula, and the province of Calabria. The harvesting of the Sorrentine crop usually begins the last of November and ends in August, while in some parts of southern Italy the season often begins as late as December and ends in July. From nearly every quarter I learn that last season's crop was greatly injured by the frost, rain, and strong winds, and that most of the shipments to the United States were at a heavy loss to the consignors. Rodi oranges of the best quality produced in Italy and enjoying a high reputation in America were absolutely depreciated. The trees are still suffering from the effects of the extreme weather

of last year. The coming season is not full of promise. It is estimated that the orange and lemon crop will be less than last year, or two-thirds of the average. The above applies to all citrus fruits of southern Italy.

Increased Importation of Lemons.—Consul Seymour writes from Palermo, October 15, 1895:

Owing to the exceptional high prices—as much as \$10 per box being paid for lemons in the United States during the month of September—40,000 boxes were imported during that month into the United States from Palermo, against 9,000 boxes for the same month of last year.

Bitter-Orange Trees for Grafting.—Consul Seymour writes from Palermo, October 22, 1895:

In Sicily, the bitter orange is mostly used for the grafting of orange and lemon trees, as the best results are obtained from it. The bitter-orange tree is produced in the following manner: A well-manured bed is prepared, and in March bitter-orange seed are inserted about 2 inches apart in it. The seed sprout in April or May, and are left to grow in the same bed for about two years; the plants are then removed in January or February and planted in single rows, well manured, at a distance of 6 or 7 inches apart. After about three years, depending on the strength of the soil, the sprouts are again transplanted in January or February, placing them about 16 feet apart. When the trunks of the small bitter-orange trees are 3 inches in diameter, they are ready for grafting purposes. The grafting is usually done in May, but may be done as late as August, provided it is not done in wet weather.

Olive-Oil Production in Italy.—In a dispatch from Palermo, October 15, 1895, Consul Seymour says:

The production of olive oil in Italy during 1894-95 amounted to 51,330,137 gallons, of which 11,505,133 gallons were produced in Sicily. The production in Italy during 1893-94 amounted to 64,738,365 gallons.

Japanese Laborers in Guadeloupe.—Vice-Consul de La Roncière, writing from Pointe-à-Pitre, Guadeloupe, October 8, 1895, says:

In March last, I advised the Department of the arrival at this port of 490 Japanese immigrants at the end of the year 1894. The immigrants were introduced into the island by the Crédit Foncier Colonial Society, a contract having been made between that society and the newcomers through the medium of a Japanese company of emigration, for five years, against a given amount of wages; lodging, food, and medical care being included. The immigration which gave such good results in Fiji and New Caledonia prompted the sugar planters of this colony to make a trial of it, but, unhappily, what had given successful results elsewhere, was to cause the greatest disappointment here. Since the arrival of the Japanese numerous complaints have been made, and the sugar planters are dissatisfied with their work. Two weeks ago, under various pretenses, 200 of them deserted their places of abode, and invading a plantation very near the city of Pointe-à-Pitre, called "Petit-Péron," they refused to leave the spot despite the efforts of the police. The Japanese Inspectors, commissioned to look after the strict execution of the contract and the general interests of the immigrants, were powerless, owing to their refusal to obey orders. Such a state of things could not continue,

as the strikers were devastating the plantation. On the morning of October 1, the governor of the island, accompanied by the commander of police and a detachment of gendarmes, went to the spot to put an end to the strike. I accompanied the governor. The governor exhorted the strikers to abandon their position, advising them of the grave consequences that their refusal to obey would lead to. Nevertheless, they declared that force alone could compel them to do so, and the governor was then obliged to command the police to act. The Japanese resisted and defended themselves with energy, but the gendarmes succeeded in the end in mastering the strikers. One hundred and forty-three Japanese were arrested, chained, and taken to the city, where they are at present in prison.

Ravages of Locusts in Zambesia.—Consul Hollis writes from Mozambique, September 3, 1895:

Captain Christiansen, of the steamship *Peters*, who has just arrived from Chinde and Kiliman, has informed me that, on account of the locusts, the sugar crop in Zambesia will be almost a total failure this year. The Zambesia Sugar Company, owners of the largest sugar plantation in the country, calculated to ship over 1,000 tons of sugar this season, but it is doubtful if they will be able to ship 200 tons. Many white men and natives who have been employed on the plantations, are now out of work and are leaving the country. The white men are going to the southern ports or to England, and the natives are going to their kraals or are emigrating. A labor agent from the island of Bourbon has lately visited Chinde and Kiliman, and as many natives are out of work, and as their gardens have been destroyed by the locusts, has had no difficulty in recruiting in a short time several hundred natives for service on the sugar plantations of his country.

The peanut crop throughout the whole country has been a very poor one, also on account of the locusts, and the natives are in a bad way generally—very poor, with neither food, clothes, or powder.

Receipts of Gold at the Melbourne Mint.—Consul-General Maratta, in a dispatch dated Melbourne, Australia, October 15, 1895, gives the following statement of the gold received at the royal mint, Melbourne, for the three months and the nine months ending September 30, 1895, and for the corresponding period of 1894:

Country.	September quarter—		First nine months—	
	1894.	1895.	1894.	1895.
	<i>Ounces.</i>	<i>Ounces.</i>	<i>Ounces.</i>	<i>Ounces.</i>
Victoria.....	183,437.23	166,020.50	543,576.49	526,570.61
New South Wales.....	172.35	47.09	272.50	220.22
New Zealand.....	9,899.49	8,138.83	34,055.90	21,798.92
Queensland.....			15.34	7.31
South Australia.....	11,726.08	9,807.09	28,467.46	33,867.84
Tasmania.....	14,092.64	8,832.42	34,843.14	37,461.04
West Australia.....	45,599.15	53,686.72	128,363.66	160,949.27
Madagascar.....			162.65	
Natal.....				8.26
Light gold coin.....	102.95	55.11	239.47	262.42
Unknown.....	1,409.91	1,219.59	6,731.84	4,606.16
Total.....	266,439.80	247,807.35	776,728.45	785,752.05

The quarter shows a decrease of 18,632 ounces, but the nine months show an increase of 9,024 ounces. The increase for western Australia for the quarter is 8,087 ounces, and for the nine months 32,586 ounces—movements which are hardly proportionate to the great expectations current.

Cotton Mills in China.—Consul-General Jernigan, writing from Shanghai, October 18, 1895, with reference to his report on "Cotton Mills in China," printed in CONSULAR REPORTS No. 182 (November, 1895), pp. 354-360, states that the last two lines of the report, "statistics show that the demand (of Japanese mills for American cotton) was more than five times greater during the past than for any preceding year," should read, "the statistics showing that in 1893 Japan took American raw cotton to the value of 1,273,421 yen, and in 1894 to the value of 2,680,671 yen."

Straits Settlements Statistics.—In CONSULAR REPORTS No. 181 (October, 1895), on fifth line of paragraph 2, page 129, the word *increase*, before \$1,517,824, should be *decrease*. This is so apparent that the misprint can scarcely mislead.

Consular Reports Transmitted to Other Departments.—The following reports (originals or copies) were transmitted during the month of November to other Departments for publication or for proper action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
A. Donn Piatt, Dublin.....	Sept. 16, 1895	Agricultural statistics of Ireland.	Department of Agriculture.
Daniel W. Maratta, Melbourne.	Aug. 10, 1895	Agricultural statistics of Victoria.	Do.
George W. Bell, Sydney.....	Sept. 1, 1895	Cattle exports of New South Wales and Queensland.	Do.
Edgar Schramm, Montevideo...	Aug. 12, 1895	Cattle exports of Uruguay.	Do.
Max Judd, Vienna.....	Aug. 30, 1895	Grain crops of Europe.....	Do.
Claude Meeker, Bradford.....	Sept. 6, 1895	Revival of mohair trade.....	Do.
Wallace S. Jones, Rome.....	Oct. 22, 1895	Italian harvests.....	Do.
E. L. Baker, Buenos Ayres.....	Sept. 10, 1895	Transportation of wheat in Argentine Republic.	Do.
Willis E. Baker, Rosario.....	Sept. 30, 1895	Transportation of wheat in Santa Fé.	Do.
E. Schneegans, Saigon.....	Oct. 19, 1895	Rice.....	Do.

FOREIGN REPORTS AND PUBLICATIONS.

British Trade with China and Japan.—An article in the London Times, of October 31, 1895, on the commercial interests of Great Britain in China and Japan, contains some interesting statements as to the commercial effects of the treaty of Shimonoseki, concluded at the end of the recent war between the two empires.

“Under Article VI, of the treaty,” says the writer in the Times, “it is stipulated that Japanese subjects shall be free to engage in all kinds of manufacturing industries in all the open cities, towns, and ports of China, and shall be at liberty to import into China all kinds of machinery, paying only the stipulated import duties thereon. Further, all articles manufactured by Japanese subjects in China shall, in respect of inland transit and internal taxes, duties, charges, and exactions of all kinds, and also in respect of warehousing and storage facilities in the interior of China stand upon the same footing and enjoy the same privileges and exemptions as merchandise imported by Japanese subjects into China. Finally, Japanese subjects purchasing goods or produce in the interior of China shall have the right temporarily to rent or hire warehouses for the storage of the articles so purchased or transported without the payment of any taxes or exactions whatever. The benefit of these provisions accrues to ourselves under Article LVI of the treaty of Tien-Tsin of June 26, 1858, subsequently confirmed by the convention signed at Peking on October 24, 1860, and to all other powers who similarly enjoy the most-favored-nation treatment. The rights secured to foreigners under the Japanese treaty are not in all respects novel—that of importing machinery, for instance, having already been asserted to us in principle; but they have now acquired a practical value which they have hitherto lacked, even where they already existed on paper, for the Japanese will enforce them with their wonted energy, and it will behoove other powers, and especially Great Britain, to do the same, under penalty of being left behind in the race.

“The treaty of Shimonoseki opens up a vast field for industrial enterprise under foreign impulse and direction, of which it is almost impossible to exaggerate the future importance. We can only measure it, to some extent, by what has already happened in Japan. The point upon which, in this connection, most stress is usually laid in Europe is the damage done to certain branches of European industry by the extraordinarily rapid growth of Japanese industry, and the results already achieved by the latter are undoubtedly calculated to strike the imagination at first sight with astonishment and alarm. The most conspicuous of these results are those connected with the cotton industry. In 1885, Japan imported only \$800,000 worth of raw cotton; in 1894, she imported \$19,500,000 worth, or more than four and twenty times as much. At the beginning of 1885, there were nineteen

spinning mills, with about 50,000 spindles in Japan, and at the end of 1893 there were forty-six, with about 600,000 spindles. The result was, of course, inevitable. The lower grade yarns, formerly imported from abroad, have practically disappeared from the Japanese market, the importation of middle grades is rapidly declining, and only the higher grades, which Japan has not yet set herself to produce, still maintain their footing. The importation of cotton yarns reached its high-water mark in 1888, when the growing supply from the native mills had not yet overtaken the growing demand arising out of a general increase of national prosperity and activity. In that year, cotton yarns were imported from Great Britain and India, in about equal proportions, to the total amount of 62,860,000 pounds. Six years later (in 1894) the importation from the same countries amounted only to 21,241,000 pounds, or barely one-third of the former figure. If the pinch has not yet been more severely felt in England, it is due to the fact that the loss has so far fallen much more heavily on Bombay than upon Lancashire, for, while the imports from the latter have been reduced 40 per cent, those from the former have suffered to the extent of 90 per cent. Nor is this all; not only at the present rate of progress is the time within sight when Japan will cease altogether to import goods of this category, but last year for the first time she actually appeared an exporter, and for the respectable figure of 4,500,000 pounds, sent chiefly to China. How entirely the diminution of imports of cotton goods is due to the successful competition of native industry, appears from the fact that wherever that competition has not yet assumed such considerable proportions, the imports, as, for instance, of cotton piece goods, have continued during the same period to steadily increase, viz, from \$5,500,000 in 1888 to close upon \$7,000,000 in 1894.

“The depreciation of silver, to which I shall have to refer later on, has, of course, contributed very largely to foster the growth of Japanese industry, but it does not alone suffice to account for it. Still less can it be ascribed to the artificial influence of excessive State protection benefiting the producers at the expense of the consumers. Everything that the State could do to encourage legitimately the growth of native industry has been done, but though European firms occasionally complain that the customs authorities favor the native as against the foreign importer, the existing treaty tariffs have at any rate hitherto been an insuperable obstacle to any prohibitive form of protection. Under the revised treaties Japan undoubtedly hopes to be in a position to favor nascent industries at home by raising the import duties on certain classes of foreign goods, but as she has done so well with the moderate tariffs hitherto in force, one may hope that she will not abuse the liberty which she is recovering to indulge in exaggerated protectionism; for if the Japanese as a nation have every reason to be proud of the rapid strides made by native industries, those investors who are personally interested in them have every reason to be equally satisfied with the handsome returns they yield. While ninety-three spinning companies in Lancashire were working at a loss, the cotton mills of Japan were paying, in 1894, dividends of 16 and 20 per cent, and even more. These are results which

may well provoke jealousy and apprehension among European manufacturers and importers of cotton goods, and, though not in the same degree, similar results may already be noted in connection with many other branches of industry. Ready-made clothing, boots and shoes, hats and caps, umbrellas, paper of every quality, beer and matches, are all represented by annually diminishing figures in the import column of Japanese trade returns, while the corresponding figures in the export column are rising every year. Silk manufactures exported from Japan have increased in value from \$54,547 in 1885 to \$8,400,000 in 1894. The annexation of Formosa may be expected to give an immense impetus to the sugar industry by securing to Japan a field of almost unlimited capacity for the production of raw sugar. Japanese coal, the exports of which have risen in value from under \$2,000,000 in 1885 to over \$6,500,000 in 1894, is rapidly driving English coal, except for special purposes, out of every market east of Singapore, and has already penetrated as far west as Colombo and Calcutta.

“That is one side of the picture, and the one upon which people in Europe generally prefer to dwell. But there is another side to which it deserves at least equal attention. The opening up of Japan, the growth of her native industries, the development of her commercial activity have introduced to us a competitor whose energy and enterprise seriously threaten certain branches of our own trade and industry, but what effect have they had upon our trade and industry taken as a whole? This is surely the material question to which that of the profit or loss of individual branches must remain subordinate. Ten years ago, the foreign trade of Japan amounted to barely \$65,500,000; in 1894, it exceeded \$230,000,000, *i. e.*, it has increased nearly three and a half fold in the space of ten years, and of this increase by far the largest proportion accrues to foreign imports. They have risen from \$28,000,000 to \$117,000,000, or nearly four and a half fold within one decade. During the same period British shipping entered and cleared from the ports of Japan has increased from under 1,500,000 tons to close upon 3,000,000 tons. Of the whole foreign trade of Japan, the British Empire takes to-day more than 40 per cent, or, in other words, the trade between Japan and the British Empire alone is nearly half as much again as was the entire trade between Japan and all foreign countries ten years ago. The balance of trade, moreover, continues to be entirely in favor of the British Empire, and especially of the United Kingdom. The total value of imports from and to the British Empire in 1894 was £9,846,134, whereof the imports into Japan represented £6,779,864, and the exports from Japan only £3,066,570, while of these amounts the United Kingdom itself only imported £626,019, whereas it exported £4,614,517. Nor must it be forgotten that calculations made in sterling, though they alone can properly represent the value of the trade from the point of view of the British producer, do not give an adequate idea of the increasing demand for British produce from the point of view of the Japanese consumer, who, owing to the depreciation of silver, has to pay to-day \$9 of his own currency for every £1 worth of British goods, for which ten years ago he had to pay only \$5. Thus,

if we take for purposes of comparison the year 1888, which the pessimists who croak over the impending doom of British trade in the Far East generally have in mind, the last year during which foreign trade, already deriving immense benefit from the general development of the country, was still relatively free from the pressure of Japanese industrial competition, we find that Japan took less than \$20,000,000 worth of goods imported from the United Kingdom, whereas in 1894, the amount required to meet her demands had risen in her own currency to over \$40,000,000.

“To appreciate thoroughly the meaning of these figures, it may not be inexpedient to compare them with those of the foreign trade of China, which has not been effected by any such remarkable development of native enterprise as has been witnessed in Japan. The total value of the foreign trade of China has only increased from \$230,000,000 to \$435,000,000 within the same decade, during which that of Japan has increased from \$64,000,000 to \$230,000,000, *i. e.*, in China it has not quite doubled, whereas in Japan it has been increased nearly three and a half fold. The foreign trade of Japan, with just over 40,000,000 inhabitants, stands already to-day where the foreign trade of China, with nearly ten times the population stood in 1885, and, at the present rate of progress in both countries, another decade may see them almost on a level. Even more significant in its bearing upon European industries is the relative growth of imports into China and Japan. In 1885, the imports into China amounted to \$132,000,000, and in 1894 to \$243,000,000, an increase of about 80 per cent. In 1885, the imports into Japan amounted to \$28,000,000, and in 1894, to \$117,000,000, an increase of over 300 per cent. Surely if statistics can teach any lesson, we may learn from what we have already witnessed in Japan not to look forward with dismay, but rather with confidence and satisfaction, both to the further development of Japan and to the impending development of China under conditions even more favorable to ourselves, if only we show ourselves determined to secure for British enterprise the fair play which alone it requires in order to reap its legitimate share of the harvest wherever fresh fields are thrown open to human activity.”

British Trade Returns.—The accounts of trade and navigation of the United Kingdom for the month of October, and for the ten months ended October 31, 1895, make the following showing of British imports and exports:

IMPORTS.

Month and ten months.	1894.		1895.	
Month ended October 31.....	£35,668,385	\$173,562,361	£36,854,168	\$179,332,381
Increase.....			1,185,783	5,770,020
Ten months ended October 31.....	340,279,975	1,655,802,358	340,758,464	1,658,130,685
Increase.....			478,489	2,328,327

Articles showing an increase during the month: Manufactures (\$6,121,428), materials for textile fabrics, metals, articles of food and drink (free), live animals (for food), and chemicals. Articles showing a decrease during the month: Food and drink (dutiable), oils, tobacco, parcel post, and miscellaneous articles.

Articles showing an increase during the ten months: Manufactures (\$25,806,635), food and drink (dutiable), oils, chemicals, dyestuffs, and parcel post.

Articles showing a decrease during the ten months: Raw materials for textiles, articles of food and drink (free), live animals, for food, tobacco, metals, parcel post, and miscellaneous articles.

EXPORTS.

British and Irish produce and manufactures.

Month and ten months.	1894.		1895.	
Month ended October 31.....	£19,147,996	\$93,174,148	£20,828,866	\$101,353,262
Increase.....			1,680,870	8,179,114
Ten months ended October 31.....	180,610,567	878,851,019	187,449,303	912,128,308
Increase.....			6,838,736	33,277,289

For the month an increase is noticeable in all classes of exports, with the exceptions of raw materials and chemicals and dyestuffs. The same increase and decrease hold good for the ten months. The principal increase for the ten months occurred in textiles and yarns (\$18,884,946), all other articles, manufactured or partly manufactured, (\$14,285,602), machinery and mill-work (\$3,460,938), apparel and haberdashery, animals (living), articles of food and drink, and parcel post.

Exports of foreign and colonial merchandise.

Month and ten months.	1894.		1895.	
Month ended October 31.....	£5,831,638	\$28,376,750	£5,460,404	\$26,570,325
Decrease.....			371,234	1,806,425
Ten months ended October 31.....	48,713,297	237,038,903	50,579,247	246,118,615
Increase.....			1,865,950	9,079,712

We thus have for the ten months ended October 31, 1894 and 1895—

Total trade.	1894.		1895.	
Imports.....	£340,279,975	\$1,655,802,358	£340,758,464	\$1,658,130,685
Exports.....	229,323,864	1,115,889,922	238,028,550	1,158,246,923
Excess of imports.....	110,956,111	539,912,436	102,729,914	499,883,762

The Foreign Trade of France.*—The following memorandum on the foreign trade of France has been prepared in the department for the Board of Trade Journal:

From the monthly statistics issued by the French customs, which, it should be observed, are provisional only, it appears that the value of the merchandise imported into France during the first nine months of the present year is about £9,700,000 less than for the same period in 1894. The exports, however, have steadily risen in value, and the figures for the first nine months of 1895 are £96,400,000, as compared with £87,600,000 for the same period of 1894, an increase of about £8,800,000.

From 1885 to 1890, the value of French exports had been steadily on the increase; £124,000,000 in 1885, £130,000,000 in 1886, £148,000,000 in 1889, and £150,000,000 in 1890; but from the latter year the amounts began to decline regularly as follows, viz, £143,000,000 in 1891, £138,000,000 in 1892, £129,000,000 in 1893, and £123,000,000 in 1894—a total drop of £27,000,000 in four years. As regards 1894, indeed, France, like many other countries, suffered from low prices and other causes which had been reflected in a general decrease in totals all round. But the diminutions in the three preceding years can not be accounted for in the same way.

The figures for the import trade show similar results. In 1891, the total value of merchandise imported into France was £191,000,000, but this total fell to £168,000,000 in 1892, £154,000,000 in 1893, and about the same in 1894. Thus, the value of the total foreign trade in 1894 has fallen to the amount of £35,000,000 less than the average of the period 1881–1890.

In comparing the results of the year 1894 with those of 1891, though the value of the trade in some articles has fluctuated, showing a decrease in one year and an improvement in the next, on the other hand there are some articles the value of which has steadily decreased from year to year without at any time showing a compensating rise, and this may be said equally of both imports and exports.

Such is the import trade in cereals, the value of which declined from £21,200,000 in 1891 to £14,500,000 in 1894; wines, of which the value imported in 1891 was £16,000,000, as against £5,800,000 in 1894; woollen yarn and manufactures, £3,500,000 in 1891, £2,100,000 in 1894, and raw cotton, the value of the imports of which was £8,100,000 in 1891, but had fallen to £6,700,000 in 1894.

Turning to the export trade, it is similarly seen that some articles have gone on invariably decreasing each year in value during the four yearly period referred to.

Woollen manufactures were exported to the value of £13,000,000 in 1891, but this figure was reduced to £9,700,000 in 1894; the value of manufactures of silk exported in 1891 was £9,800,000, but only £8,900,000 in 1894; the exports of ready-made clothing and underwear reached a value of £5,300,000 in 1891, but fell to £4,000,000 in 1894; the value of

* From British Board of Trade Journal for November, 1895, pp. 515–516.

leather manufactures exported fell over £2,000,000 in the above period—£5,500,000 in 1891 to £3,200,000 in 1894; and the exports of cheese and butter, the value of which was £3,700,000 in 1891, were worth but £2,600,000 in 1894.

Other articles of the export trade, though not showing the steady decline year by year since 1891 as those enumerated above, still manifest a marked decrease in the figures for 1894. Silk (unmanufactured) was exported to the value of £4,400,000 in 1891. This amount rose to £5,300,000 in 1892, but fell to £5,000,000 in 1893, and to £3,900,000 in 1894. The exports of hides and skins were valued at £3,200,000 in 1891, and at £2,600,000 in 1894, though this latter figure showed an improvement of £200,000 on the amount for the previous year. Tools and manufactures of metal (not including machinery) fell from £3,600,000 in 1891 to £2,300,000 in 1894; raw sugar, from £2,300,000 in 1891 to £1,900,000 in 1894; machinery and parts of machinery, from £1,800,000 in 1891 to £1,400,000 in 1894; jewelery, etc., from £1,800,000 in 1891 to £800,000 in 1894; cereals, from £1,700,000 in 1891 to £600,000 in 1894; eggs of all kinds, from £900,000 in 1891 to £600,000 in 1894. Live animals were exported to the value of £800,000 in 1891, and this amount rose to £1,500,000 in 1893, but fell again to £400,000 in 1894; fatty substances fell from £600,000 in 1891 to £400,000 in 1894.

Turning now to the trade of the first nine months of 1895, it is found that, as regards the imports, the chief decreases, as compared with the same period of 1894, were in oleaginous seeds, £1,600,000; wool, £900,000; hides (raw), £500,000; wooden blocks for paving, £400,000; and wood for building purposes, £300,000.

In the figures for the export trade a steady rise is apparent. Having still in view the comparison of the amounts for the first nine months for 1895 with those for a like period of 1894, it is found that the exports of woollen manufactures show the most decided improvement—£9,500,000 for 1895 as against £7,100,000 for 1894. Silk manufactures for the same period have improved £500,000; hides and skins (prepared), £500,000; tools and manufactures of metal (not including machinery), £400,000; manufactures of cotton, £400,000; manufactures of leather, £300,000; woollen yarn, £300,000; and chemical products, £200,000. The exports of furniture and manufactures of wood and machinery likewise show an increase of less than £100,000 each. The most notable decrease is in ladies' ready-made dresses, the value of which has declined from £1,400,000 for the first nine months of 1894 to 1,200,000 for a similar period in 1895.

Exhibition of California Products in Berlin.*—There was a meeting yesterday in the Equitable Palace of the heads of the firms Kloth, Schünemann

* Translated from the Allgemeine Börsen-Zeitung of October 23, 1895, a Berlin daily devoted to commercial matters. See also CONSULAR REPORTS No. 180, p. 120, and No. 181, p. 250, for further information relative to this subject.

& Co., of Hamburg, Berlin, Paris, London, etc., who have undertaken on a large scale the introduction of California products into Germany and Europe. Director W. E. von Johannsen and several California friends were also present at the meeting. It related to the closing of the exhibition, which, according to the programme, had lasted three months. From the many inquiries made and orders given the fact was established that there was in Europe, especially in Germany, England, Holland, Belgium, Sweden and Norway, and Denmark, a large field for the distribution of California products, especially in wholesale quantities of food products, and, above all, of the splendid dried pears, peaches, apricots, silver plums, and nectarines. Stress was laid on the fact that the dried fruit of California was desiccated on wood trays in the open air and not, as in the east of the United States, in zinc machines; and that it was, therefore, entirely free of noxious ingredients. Several raw products were found to be serviceable in many ways for industrial purposes, and several new German industries have actually owed their origin to this exhibition. The question of establishing warehouses in the great cities of the principal countries consuming such articles was more carefully looked into, and a great step was made toward the realization of this plan. The announcement is also noteworthy that next spring a company, with its chief office in Berlin, is to open a California Bodega in a fine building in Berlin, where now only the popular California wines, especially the fine port and sherry wines, are sold.

Establishment of Cotton Mills in China.*—The Belgian consul at Shanghai, writing to the Bulletin du Musée Commercial, states that some English, Germans, and Americans have just ordered machinery for the establishment of five cotton mills at Shanghai. These factories will, it is stated, be in a position to compete with Manchester, cotton being at hand and labor very cheap. The daily wage of the Chinese workman is from 5d. to 6¾d. a day, and as regards the women and children who are employed in the factories in large numbers, they are paid at the rate of from 2d. to 3d. a day.†

New Series of Russian Consular Reports.‡—The Journal de St. Petersburg, in its issue of the 11th (23d) of September last, states that the Department of Commerce and Manufactures, desiring to make known, as far as possible, to the commercial world any information received as to the trade and industries of other countries, has just undertaken the periodical publication of the accounts and reports of Russian consuls and commercial agents of the Ministry of Finance abroad. These will be published *in extenso* or

* From British Board of Trade Journal for November, 1895, p. 578.

† See "Cotton Mills in China," CONSULAR REPORTS No. 182 (November, 1895), pp. 354-360.

‡ From British Board of Trade Journal for November, 1895, p. 569.

in extracts as they are received, and each number will be devoted to one foreign country. In certain cases a summary of the foreign trade of the country in question will be added, together with explanatory notes, statistical tables, etc.

The first number has just appeared, and is devoted to Sweden and Norway. The figures come down to the year 1893, but yet have an undeniable interest, as, since 1893, the commercial situation of the Scandinavian countries has not undergone any change.

The next numbers will be devoted to the Balkan states, Germany, and the trade of Asia.

Revenue of the Kaiser Wilhelm Canal.*—A dispatch dated October 12 last, has been received from Sir E. Malet, Her Majesty's ambassador at Berlin, inclosing a statement published in the *Reichsanzeiger* showing the amount of revenue from canal and towage dues realized by the Kaiser Wilhelm [North Sea and Baltic] Canal during the months of July, August, and September (the first quarter since it was opened for traffic), amounting in all to £11,682. In July the revenue amounted to £3,159; in August, £4,114; in September, £4,409.

Examinations for the United States Consular Service.—The British Board of Trade Journal for November, 1895, reprints, pp. 519–520, the recent orders of the President and Secretary of State with reference to appointments to certain grades of the consular service of the United States and prescribing rules for the examination of applicants.

* From British Board of Trade Journal for November, 1895, p. 543.

INDEX.

VOL. XLIX—Nos. 180, 181, 182, AND 183.

Adulteration of dyes and colors in Germany, 245.
 Africa (South), rolling stock for railways, 391.
 Agrarian movement in Germany, 431.
 Agricultural exhibition, Sierra Leone, 410.
 Agricultural statistics :
 Ireland, 370.
 Victoria, 372.
 Agriculture, Yucatan, 499.
 Alcoholism in France, 83.
 Algeria, declared exports for United States, 305.
 America, steamship communication with Austria, 243.
 American and British consular reports, 300.
 American canned goods misrepresented, 41, 248.
 American cotton goods in Jamaica, 114.
 American dried apples at Hamburg, 110.
 American dried-apple slices in Germany, 109.
 American furniture in Egypt, 259.
 American leather in Germany, 267.
 American-Newfoundland trade, 244.
 American opportunities, Uruguay, 344.
 American shipping for Asiatic ports, 184.
 American shoes in Ireland, 273.
 American trade opportunities in Venezuela, 204.
 American trade with Paraguay, 351.
 American vs. European trade systems in Brazil, 113.
 American vs. European wines, 93.
 American woods, demand for, in France, 384.
 Animals for food, Japan, 216.
 Apple slices, dried American, in Germany, 109.
 Apples, dried, American, at Hamburg, 110.
 Apples for cider, production in France, 94.
 Argentine Republic :
 Grain crops, 477.
 Wheat transportation, 460.
 Army, Korean, 302.
 Artificial wines, Portugal, 400.
 Asia, American shipping for Asiatic ports, 184.

Asia (Eastern), commercial missions, 381.
 Associations, rural loan, in Germany, 425.
 Astronomical instrument sellers, opportunity for, in Spain, 391.
 Auction shops, retail, in Luxemburg, 112.
 Australia :
 Cost of living, 74.
 Employers' unions, 72.
 German coke, 243.
 Gold receipts at the Melbourne mint, 244, 530.
 Hours of labor, 73.
 Laborers' condition, 73.
 Maritime strike, 73.
 New South Wales cattle exports, 374.
 Queensland cattle exports, 374.
 Receipts of gold at the Melbourne mint, 244, 530.
 State bank, 75.
 Trades unions, 72.
 Victoria agricultural statistics, 372.
 Wages and food prices, 69.
 Austria :
 Trieste, new steamship line, 390.
 Wages, 12.
 Austria-Hungary :
 Declared exports for United States, 305.
 Exports of horses, 441.
 Exports to, from United States, 144.
 Fiume, sea traffic, 439.
 Rice culture, 437.
 Sugar export, 441.
 Trade, production, etc., 436.
 Trade with Egypt, 440.
 Austro-American steamship communication, 243.
 Austro-Hungarian consuls, duties, 450.
 Bahia, cotton factories, 291.
 Balkan countries, trade with Germany, 513.
 Baltic and Black seas, projected canal between, 398.
 Baltic-North Sea Canal, 290.
 Baltic Sea Canal, customs regulations, 116.

Banana trade of Colombia, 502.

Bananas, export taxes on, Nicaragua, 389.

Bank:

American, Shanghai, 359.

Savings, Italy, 528.

State, Australia, 75.

Banking in Martinique, financial difficulties, 481.

Banking projects:

China, 358.

Japan, 358.

Barranquilla, shipping and railway charges, 234.

Bavaria, damage to forests by caterpillars, 521.

Belgium:

Declared exports for United States, 307.

Manufacture of matches, 390.

New tariff, 62.

Belgium and Denmark, wooding of dunes, 51.

Berlin, exhibition of California products, 250, 538.

Bermuda, lime industry, 526.

Bills of lading, Cuba, 523.

Black and Baltic seas, projected canal between, 398.

Bluefields light-house, 247.

Bohemia, trout farms, 41.

Bond company's (United States) contract, 31.

Brandy, French cognac, 86.

Brazil:

American vs. European trade systems, 113.

Bahia, cotton factories, 291.

Declared exports for United States, 309.

Flour trade with Hungary, 446.

Monazite, 241.

Refund of duties, 526.

Bricks and tiles in Spain, 171.

Brimstone industry, depression, 385.

British Africa, declared exports for United States, 309.

British and American consular reports, 300.

British commercial mission to China, 399.

British indemnity, Nicaragua, 387.

British India, declared exports for United States, 309.

British trade returns, 123, 255, 535.

British trade with China and Japan, 532.

Bucaramanquina, Colombia, 343.

Bulgaria, musical instruments, 514.

California products:

Exhibition at Berlin, 250, 538.

Germany, 120.

Canada:

Declared exports for United States, 310.

Dry-dock tolls, Kingston, 47.

Fruit exports to, from Messina (1894-95), 142.

Fruit exports to, from Messina, Catania, and Palermo (1894-95), 141.

New railroad in New Brunswick, 386.

New tariff of Newfoundland, 53.

Newfoundland-American trade, 244.

Nova Scotia iron and steel, 246.

Prevention of forest fires, 276.

Canal:

Baltic Sea, customs regulations, 116.

North Sea, customs regulations, 116.

Projected, between Baltic and Black seas, 398.

Revenue of the Kaiser Wilhelm, 540.

Suez, business, 238.

Canned goods, American, misrepresented, 41, 248.

Cardiff, exports of tin plates and sheets, 189.

Carpets, hemp and cotton, Japan, 217.

Carriages, horseless, in France, 25, 265.

Catania, fruit crop (1895), 142.

Caterpillars:

Cotton, Egypt, 242.

Damage to Bavarian forests, 521.

Cattle, export of:

From Denmark, proclamation concerning, 527.

New South Wales, 374.

Queensland, 374.

Cattle industry, Uruguay, 348.

Central America, treaty between states, 387.

Cereals, outlook for, in Russia, 15.

Certificates, gold, in Russia, 22.

Certificates-of-origin shipments to Switzerland, 247.

Ceylon, declared exports for United States, 313.

China:

Banking projects, 358.

British commercial mission, 399.

Cotton cultivation, 357.

Cotton mills, 354, 531.

Establishment of cotton mills, 539.

Misrepresentation of American canned goods, 248.

New treaty port of Sha-shih, 397.

China—Continued.

Shanghai, proposed American bank, 359.
Trade (1894), 360.

China and Japan :

British trade, 532.
Commercial advantage of treaty between,
36.

China and Korea, commerce with Japan, 34.

Chinese in Nicaragua, 236.

Chinese loan, 198.

Cider crop of France, 93.

Climate and public health of Malaga, 104.

Cloths and yarns, ramie, 181.

Cochin, trade, 391.

Coffee crop of Colombia, 526.

Cognac brandy, French, 86.

Coke, German, Australia, 243.

Colombia :

Banana trade, 502.

Barranquilla, shipping and railway
charges, 234.

Cartagena-United States mail service,
119.

Coffee crop, 526.

Gum copal (bucaramanquina), 343.

Colors and dyes, adulteration, in Germany,
245.

Conference, Paris, on weights and measures,
353.

Consular reports :

British and American, 300.

New series, Russian, 539.

Reprinted abroad, 121, 249, 391.

Consular service :

United States and foreign trade, 456.

Examinations, 208, 540.

Consuls, Austro-Hungarian, duties, 450.

Copais, Lake, drainage, 80.

Copal, gum (bucaramanquina), Colombia,
343.

Copyright in Denmark, 246.

Copyright treaty between Mexico and Spain
391.

Corn, Indian, in Italy, 527.

Cotton :

Caterpillar, Egypt, 242.

Crop of Egypt, 259.

Cultivation, China, 357.

Factories, Bahia, 291.

Prints and embroideries in Switzerland,
77.

Spinning, Japan, 357.

Cotton and hemp carpets, Japan, 217.

Cotton and silk industries, Switzerland, 75.

Cotton goods :

American, in Jamaica, 114.

Trade, Penang, 136.

Trade, Singapore, 132.

Cotton mills :

China, 354, 531, 539.

Japan, 217.

Crop :

Cider, of France, 93.

Coffee, of Colombia, 526.

Cotton, of Egypt, 259.

Fruit, of Italy (1895), 141.

Fruit, of Messina, 141.

Fruit, of Palermo, 142.

Grain, of Hungary, 442.

Lemon, of Palermo, 385.

New sugar, of Europe, 508.

Orange and lemon in southern Italy, 528.

Crops, grain :

Argentine Republic, 477.

Europe, 378.

Cuba :

Bills of lading, 523.

Declared exports for United States, 313.

Exports to United States, 228.

Imports into, from United States, 229.

Manganese ore for United States, 245.

Sugar exports, 384.

Trade with United States, 228.

Currency in Russia, 21.

Custom-house :

Figures, Yucatan, 501.

Regulations, Nicaragua, 387.

Customs duties, Japan (1894), 228.

Customs regulations :

New, Madagascar, 285.

North and Baltic Sea Canal, 116.

Cycle show at Turin, 48.

Denmark :

Copyright, 246.

Declared exports for United States, 314.

Electric lamp-posts, 50.

Proclamation as to export of cattle, 527.

Denmark and Belgium, wooding of dunes, 51.

Deodorizer, peat, 263.

Disinfectant, peat, 263.

Dock, dry, tolls at Kingston, Canada, 47.

Dominican Republic :

Tariff, 119.

United States capital in Santo Domingo,
385.

- Drainage of Lake Copais, 80.
 Dried apples, American, in Germany, 109, 110.
 Dry-dock tolls, Kingston, Canada, 47.
 Dunes, wooding in Denmark and Belgium, 51.
 Dutch West Indies, declared exports for United States, 315.
 Duties:
 Brazil, refund, 526.
 Customs, Japan (1894), 228.
 Export, Madagascar, 289.
 Export, Uruguay, 351.
 Duty, increased, on liquors in Mozambique, 121.
 Dyes and colors, adulteration, in Germany, 245.
 Earthenware, marbles, and minerals in Spain, 171.
 Earthquake-proof houses, 120.
 East Indian rice in Martinique, 490.
 Education:
 Yucatan, 498.
 Higher, in Egypt, 260.
 Egypt:
 American furniture, 259.
 Business of the Suez Canal, 238.
 Cotton caterpillar, 242.
 Cotton crop, 259.
 Higher education, 260.
 Trade with Austria-Hungary, 440.
 Unusual flood of the Nile, 384.
 Egypt and Greece, treaty between, 257.
 Electric lamp-posts, 50.
 Electric plow in Germany, 161.
 Embroideries and cotton prints, Switzerland, 77.
 Emigration, German, 296.
 England:
 Ramie-spinning machinery, 172.
 Revival of the mohair trade, 366.
 Wages, 6, 7.
 Erhardt process in metal working, 434.
 Europe:
 Forestry laws, 279.
 Grain crops, 378.
 Infantile life insurance, 280.
 New sugar crop, 508.
 Uses of peat, 260.
 Wine production, 93.
 European vs. American trade systems in Brazil, 113.
 European vs. American wines, 93.
 Evaporators, fruit, in Germany, 108.
 Exhibition:
 Agricultural, Sierra Leone, 410.
 California products at Berlin, 250, 538.
 International naval, 116.
 National rural, Uruguay, 346.
 Naval, at Kiel, 516.
 South African Republic, 394.
 Export duties:
 Madagascar, 289.
 Uruguay, 351.
 Export taxes on bananas, Nicaragua, 389.
 Export trade, Germany, 297.
 Exporters to Japan, hints for, 220.
 Exporters, United States, Yucatan, 500.
 Exports:
 Austria-Hungary, from United States, 144.
 Cattle, from Denmark, proclamation concerning, 527.
 Cattle, of New South Wales, 374.
 Cattle, Queensland, 374.
 Cuba to United States, 228.
 Cuban sugar, 384.
 Flour, from Hungary, 445.
 Flour, from Hungary to England, 448.
 Fruit to United States and Canada from Messina (1894-95), 142.
 Fruit to United States and Canada from Messina, Catania, and Palermo (1894-95), 141.
 Italian fruit, 119.
 Japan (1894), 224.
 Manchester to United States, 248.
 Ore, from Spain to United States, 103.
 Sugar, from Martinique to United States, diversion of, 490.
 Sugar of Austria-Hungary, 441.
 Sugar, spirits, and plums from Hungary, 449.
 Tin plates and sheets from Cardiff, 189.
 United States, from Japan (1894), 226.
 United States, to Straits Settlements, 130.
 Wine, from Hungary to India, 449.
 Yucatan, 500.
 Exports declared for United States:
 Algeria, 305.
 Austria-Hungary, 305.
 Belgium, 307.
 Brazil, 309.
 British Africa, 309.
 British India, 309.
 Canada, 310.

Exports declared for United States—Cont'd.

Ceylon, 313.
 Cuba, 313.
 Denmark, 314.
 Dutch West Indies, 315.
 French North America, 312.
 Germany, 315.
 Gibraltar, 319.
 Greece, 319.
 Italy, 319.
 Japan, 323.
 Luxemburg, 324.
 Mexico, 324.
 New Zealand, 327.
 Nicaragua, 327.
 Russia, 327.
 Spain, 328.
 Sweden and Norway, 329.
 Switzerland, 330.
 United Kingdom, 331.

Exposition :

Hygienic, of Warsaw, 523.
 Paris (1900), 352.

Expositions and commercial museums, 124.

Expositions and museums, 253.

Factories, cotton, in Bahia, 291.

Fair of Nijni-Novgorod (1894), 189.

Farms, trout, in Bohemia, 41.

Fiber, peat, as a textile, 261.

Fires, forest, prevention, 276.

Fish oil, Japan, 217.

Fisheries, Russian seal, 196.

Fishing, mackerel, off the Irish coast, 524.

Fiume, sea traffic, 439.

Flour exports from Hungary, 445.

Flour exports from Hungary to England, 448.

Flour trade, Hungary's, with Brazil, 446.

Flour trade of Hungary (1894), 444.

Flour, United States, in Martinique, 486.

Food prices and wages in Australia, 69.

Forest fires, prevention, 276.

Forestry laws of Europe, 279.

Forests, Bavarian, damage to, by caterpillars, 521.

Formosa trade, 38.

France:

Alcoholism, 83.

Cider crop, 93.

Cognac brandy, 86.

Collection of commercial information by Government, 251.

No. 183—10.

France—Continued.

Demand for American woods, 384.

Franco-Swiss tariff war, 125.

Horseless carriages, 25, 265.

Italian commercial museum in Paris, 527.

New vine plant, 89.

Paris conference on weights and measures, 354.

Paris exposition (1900), 352.

Production of apples for cider, 94.

State aid to industrial schools, 183.

Swiss commercial relations, 230.

Wine making, 87.

Woolen industry, 275.

Franco-Swiss commercial relations, 230.

Franco-Swiss tariff war, 125.

French cognac brandy, 86.

French mission to the far East, 400.

French North America, declared exports for United States, 312.

Fruit crop :

Catania (1895), 142.

Italy (1895), 141.

Messina (1895), 141.

Palermo (1895), 142.

Fruit evaporators in Germany, 108.

Fruit exports, Italy, 119.

Fruit exports for United States and Canada:

Catania and Palermo, 141.

Messina (1894-95), 142.

Fruit, new process for keeping fresh, 24.

Furniture, American, for Egypt, 259.

Germany:

Adulteration of dyes and colors, 245.

Agrarian movement, 431.

American dried-apple slices, 109.

American leather, 267.

Berlin exhibition of American canned goods, 250.

Berlin exhibition of California products, 250.

California products, 120.

Customs regulations for the North and Baltic Sea Canal, 116.

Declared exports for United States, 315.

Electric plow, 161.

Emigration, 296.

Erhardt process in metal working, 434.

Exhibition of California products in Berlin, 528.

Export trade, 297.

Germany—Continued.

- Fruit evaporators, 108.
- Hamburg, American dried apples, 110.
- Hardening steel by gas, 118.
- International naval exhibition, 116.
- Iron and steel trade, 383.
- Machines for United States, 111.
- "Made in Germany," 117.
- Naval exhibition at Kiel, 516.
- New lamp, 107.
- North Sea-Baltic Canal, 290.
- Petroleum monopoly, 121.
- Quebracho as a tanning material, 269.
- Revenue of the Kaiser Wilhelm Canal, 540.
- Rural loan associations, 425.
- Societies aiding trade, 459.
- Statistics of miners, 510.
- Trade with the Balkan countries, 513.
- Wages, 6.
- Westphalian hams, 271.
- Gibraltar, declared exports for United States, 319.
- Ginseng, Japan, 215.
- Glass and crystal, Spain, 171.
- Gold basis, transactions on, in Russia, 20.
- Gold certificates in Russia, 22.
- Gold receipts at the Melbourne mint, 244, 530.
- Grafting, bitter-orange trees, 529.
- Grain crops:
 - Argentine Republic, 477.
 - Europe, 378.
 - Hungary, 442.
- Great Britain, trade returns, 393.
- Greece:
 - Declared exports for United States, 319.
 - Drainage of Lake Copais, 80.
- Greece and Egypt, treaty between, 257.
- Guadeloupe, Japanese laborers, 529.
- Guaymas affairs, 120.
- Gum copal (bucaramanquina), Colombia, 343.
- Hamburg, American dried apples, 110.
- Hams, Westphalian, 271.
- Hawaii, diversion of trade of, from San Francisco to New York, 385.
- Hemp and cotton carpets, Japan, 217.
- Holland, wages, 7.
- Horseless carriages in France, 25, 265.
- Horses, exports of, from Austria-Hungary, 441.

Houses, earthquake-proof, 120.

Huelva mines, 90.

Hungary:

- Exports of sugar, spirits, and plums, 449.
- Flour exports, 445.
- Flour exports to England, 448.
- Flour trade (1894), 444.
- Flour trade with Brazil, 446.
- Grain crop, 442.
- Tobacco administration, 448.
- Wine exports to India, 449.
- Hygienic exposition of Warsaw, 523.

Import trade of Japan, increase, 218.

Imports:

- Cotton goods into Straits Settlements (1894), 132.
- Cuba, from United States, 229.
- Japan (1894), 221.
- Japan, from United States (1894), 225.
- Lemons into United States from Palermo, 529.
- Straits Settlements from United States, 130.
- Yucatan, 500.
- Indemnity, British, Nicaragua, 387.
- India, wine exports from Hungary, 449.
- Indian corn in Italy, 527.
- Infantile life insurance in Europe, 280.
- Instruments, astronomical, opportunity for sellers in Spain, 391.
- Instruments, musical, Bulgaria, 514.
- Insurance companies, private, in Switzerland, 284.
- Insurance, infantile life, in Europe, 280.
- Inundation of the Rio Grande, 389.
- Ireland:
 - Agricultural statistics, 370.
 - American shoes, 273.
 - Mackerel fishing off the Irish coast, 524.
 - Ramie yarns and cloths, 181.
 - Wages, 7.
- Iron and machines, German, in Russia, 512.
- Iron and steel:
 - Nova Scotia, 246.
 - Germany, 383.
- Iron foundry and machine industry, Switzerland, 78.
- Iron, German, for Japan, 245.
- Iron ore and iron industries, Russia, 13.
- Italian commercial museum in Paris, 527.
- Italy:
 - Bitter-orange trees for grafting, 529.

Italy—Continued.

Catania fruit crop (1895), 142.
 Cycle show at Turin, 48.
 Declared exports for United States, 319.
 Depression in brimstone industry, 385.
 Earthquake-proof houses, 120.
 Fruit crop (1895), 141.
 Fruit exports, 119.
 Importation of lemons into United States from Palermo, 529.
 Indian corn, 527.
 Messina, Catania, and Palermo, exports from, to United States and Canada, 141.
 Messina fruit crop, 141.
 Olive-oil production, 529.
 Orange and lemon crop, southern, 528.
 Palermo fruit crop, 142.
 Palermo lemon crop, 385.
 Phylloxera, 243, 528.
 Recent commerce, 202.
 Savings banks, 528.
 Wages, 17.

Jamaica, cotton goods, 114.**Japan:**

Animals for food, 216.
 Banking projects, 358.
 Commerce and industries, 215.
 Commerce with China and Korea, 34.
 Cotton mills, 217.
 Cotton spinning, 357.
 Customs duties (1894), 225.
 Declared exports for United States, 323.
 Exports from (1894), 224.
 Exports from, to United States (1894), 226.
 Fish oil, 217.
 German iron, 245.
 Ginseng, 215.
 Hemp and cotton carpets, 217.
 Hints for exporters to, 220.
 Import trade, increase, 218.
 Imports into (1894), 221.
 Imports into, from United States (1894), 225.
 Matches, 218.
 New railways, 396.
 Paper, 216.
 Peppermint, 215.
 Rice, 215.
 Taxes, 216.
 Tea, 215.

Japan—Continued.

Tobacco, 215.
 Trade (1894), 222.
 Japan and China:
 British trade, 532.
 Commercial advantage of treaty between, 36.
 Japanese laborers in Guadeloupe, 529.
 Jews, foreign, in Russia, status, 364.

 Kaiser Wilhelm canal, revenue, 540.
 Kiel, naval exhibition, 516.
 Kingston, Canada, dry-dock tolls, 47.
 Knitted underwear, Switzerland, 79.
 Kola-nut trade, Sierra Leone, 409.
 Korea:
 Affairs, 302.
 Army, 302.
 Mining regulations, 302.
 Postal bureau, 302.
 Korea and China, commerce with Japan, 34.

 Labor:
 Conditions, Yucatan, 496.
 Hours of, Australia, 73.
 In mines of Huelva, 103, 104.
 Legislation in Luxemburg, 299.
 Laborers:
 Condition of, in Australia, 73.
 Japanese, in Guadeloupe, 529.
 Lake Copais, drainage, 80.
 Lamp, a new German, 107.
 Lamp-posts, electric, 50.
 Laws, forestry, of Europe, 279.
 Leather, American, in Germany, 267.
 Lemon and orange crop in southern Italy, 528.
 Lemon crop of Palermo, 385.
 Lemons imported into United States from Palermo, 529.
 License tax, Sierra Leone, 409.
 Licenses, commercial, Nicaragua, 507.
 Light-house:
 Bluefields, 247.
 Tuxpan, 248.
 Lime industry in Bermuda, 526.
 Lint, peat, 265.
 Liquors:
 Increased duty on, in Mozambique, 121.
 Monopoly of, Nicaragua, 505.
 Living, cost of, Australia, 74.
 Loan:
 Associations, rural, in Germany, 425.
 Chinese, 198.

- Locust ravages in Zambesia, 530.
- Luxemburg :
- Declared exports for United States, 324.
 - Labor legislation, 299.
 - Moselle vintage (1895), 383.
 - Retail auction shops, 112.
 - Suppressing swine plague, 298.
- Machine industry and iron foundry, Switzerland, 78.
- Machinery in the Straits Settlements, 140.
- Machines and iron, German, in Russia, 512.
- Machines, German, for United States, 111.
- Mackerel fishing off the Irish coast, 524.
- Madagascar :
- Export duties, 289.
 - New customs regulations, 285.
- "Made in Germany," 117.
- Mail service, Cartagena-United States, 119.
- Manchester exports to United States, 248.
- Manganese ore, Cuban, for United States, 245.
- Manure, peat, 263.
- Marbles, earthenware, and minerals in Spain, 171.
- Market, wool, Russia, 199.
- Martinique :
- Banking—financial difficulties, 481.
 - Business depression, resources, etc., 478.
 - East Indian rice, 490.
 - Proposed tariff changes for United States products, 489.
 - United States flour in Martinique, 486.
- Matches :
- Japan, 218.
 - Manufacture in Belgium, 390.
- Maya Indians, Yucatan, 497.
- Measures and weights, Paris conference, 353.
- Melbourne mint gold receipts, 244, 530.
- Messina, fruit crop, 141.
- Metal working, Erhardt process, 434.
- Mexico :
- Affairs at Guaymas, 120.
 - Declared exports for United States, 324.
 - Interstate tariffs, 490.
 - Inundation of the Rio Grande, 389.
 - Taxation of minerals, 27.
 - Tehuantepec railroad contract, 33.
 - Trade with United States, 32.
 - Tuxpan light-house, 248.
 - United States bond company's contract, 31.
 - Wages, 12.
- Mexico and Spain, copyright treaty between, 391.
- Mills, cotton :
- China, 354, 531.
 - Establishment in China, 539.
- Mineral water, Spain, 172.
- Minerals, marbles, and earthenware in Spain, 171.
- Minerals, taxation in Mexico, 27.
- Miners' statistics, Germany, 510.
- Mines of Huelva, 96.
- Mining regulations, Korea, 302.
- Mint, Melbourne, gold receipts, 244, 530.
- Missions :
- British commercial, to China, 399.
 - Commercial, to eastern Asia, 381.
 - French, to far East, 400.
- Mohair trade, revival, 360.
- Monazite in Brazil, 241.
- Monopoly of liquors, Nicaragua, 505.
- Monopoly, petroleum, Germany, 121.
- Mortgage-bank shares, Russia, 414.
- Mortgages, real estate, Russia, 410.
- Moselle vintage (1895), 383.
- Mozambique :
- Increased duty on liquors, 121.
 - Ravages of locusts in Zambesia, 530.
- Museum, Italian commercial, in Paris, 527.
- Museums and expositions, 253.
- Museums, commercial, and expositions, 124.
- Musical instruments in Bulgaria, 514.
- Naval exhibition :
- International, 116.
 - Kiel, 510.
- New Brunswick, new railroad, 386.
- Newfoundland-American trade, 244.
- Newfoundland, new tariff, 53.
- New York, diversion of Hawaiian trade to, from San Francisco, 385.
- New Zealand, declared exports for United States, 327.
- Nicaragua :
- Affairs, 387.
 - British indemnity, 387.
 - Chinese in, 236.
 - Commercial licenses, 507.
 - Custom-house regulations, 387.
 - Declared exports for United States, 327.
 - Export taxes on bananas, 389.
 - Monopoly of liquors, 505.
 - Railways and telegraphs, 242, 387.
 - Steamships withdrawn, 389.

- Nijni-Novgorod, fair (1894), 189.
 Nile, unusual flood, 384.
 North Sea-Baltic Canal, 290.
 North Sea Canal, customs regulations, 116.
 Nova Scotia, iron and steel, 246.
 Nut, kola, trade, Sierra Leone, 409.

 Oil, fish, Japan, 217.
 Oil, olive, production in Italy, 529.
 Oleomargarine in Puerto Rico, 503.
 Olive-oil production in Italy, 529.
 Orange and lemon crop in southern Italy, 528.
 Orange, bitter, trees for grafting, 529.
 Ore :
 Cuban manganese, for United States, 245.
 Exports from Spain to United States, 103.
 Iron and iron industries, Russia, 13.

 Palermo :
 Fruit crop, 142.
 Imports of lemons into United States, 529.
 Lemon crop, 385.
 Paper, Japan, 216.
 Paraguay, trade with America, 351.
 Paris :
 Conference on weights and measures, 353.
 Exposition (1900), 352.
 Italian commercial museum, 527.
 Peat :
 Deodorizer, 263.
 Disinfectant, 263.
 Fiber as a textile, 261.
 Lint, 265.
 Litter, 262.
 Manure, 263.
 Uses in Europe, 260.
 Penang :
 Cotton-goods trade, 136.
 Sugar cultivation, 137.
 Peppermint, Japan, 215.
 Petroleum monopoly in Germany, 121.
 Phylloxera, Italy, 243, 528.
 Pipes, metal, new method of making, 241.
 Plague, swine, suppressing in Luxemburg, 298.
 Plow, electric, in Germany, 161.
 Plums, exports from Hungary, 449.
 Poland, hygienic exposition of Warsaw, 524.
 Porcelain in Spain, 171.

 Port, new treaty, Sha-shih, China, 397.
 Ports, American shipping for Asiatic, 184.
 Portugal, artificial wines, 400.
 Postal bureau, Korea, 302.
 Potato trade of Scotland, 201.
 Prices, food, and wages in Australia, 69.
 Puerto Rico, oleomargarine, 503.

 Quebracho as a tanning material, 269.
 Queensland cattle exports, 374.

 Railroad :
 New, New Brunswick, 386.
 New, Syria, 380.
 Tehuantepec, contract, 33.
 Railroads and telegraphs, Nicaragua, 387.
 Railroads, Yucatan, 498.
 Railway and shipping charges at Barranquilla, 234.
 Railway and telegraph, Nicaragua, 242.
 Railway project, Sierra Leone, 409.
 Railways :
 New, Japan, 396.
 Rolling stock for, South Africa, 391.
 Ramie :
 Spinning machinery, 172.
 Yarns and cloths, 181.
 Rice :
 Culture in Austria-Hungary, 437.
 East Indian, Martinique, 490.
 Japan, 215.
 Rio Grande, inundation, 389.
 Russia :
 Chinese loan, 198.
 Commerce (1895), 17.
 Commercial transactions on a gold basis, 20.
 Currency, 21.
 Declared exports for United States, 327.
 Gold certificates, 22.
 Iron and German machines, 512.
 Iron ore and iron industries, 13.
 Mortgage-bank shares, 414.
 New series of consular reports, 539.
 Nijni-Novgorod fair (1894), 189.
 Outlook for cereals, 15.
 Projected canal between Baltic and Black seas, 398.
 Real-estate mortgages, 410.
 Seal fisheries, 196.
 Status of foreign Jews, 364.
 Wages, 12.
 Wool market, 199.

Salt :

Industry, Venezuela, 293.

Production in Spain, 94.

Samoan trade, 241.

San Francisco, diversion of Hawaiian trade from, to New York, 385.

Santo Domingo, United States capital in, 385.

Savings banks, Italy, 528.

Schools, industrial, State aid to, in France, 183.

Scotland :

Potato trade, 201.

Wages, 7.

Sea traffic of Fiume, 439.

Seal fisheries, Russian, 196.

Shanghai, American bank proposed, 359.

Sha-shih, China, new treaty port, 397.

Shipping, American, for Asiatic ports, 184.

Shipping and railway charges at Barranquilla, 234.

Shoes, American, in Ireland, 273.

Sierra Leone :

Agricultural exhibition, 410.

Industrial resources and trade, 401.

Kola-nut trade, 409.

License tax, increase, 409.

Railway project, 409.

Recent trade, 408.

Silk and cotton industries, Switzerland, 75.

Singapore :

Cotton-goods trade, 132.

Exports to United States, 131.

South Africa, rolling stock for railways, 391.

South African Republic, exhibition, 394.

Spain :

Declared exports for United States, 328.

Glass and crystal, 172.

Labor in mines of Huelva, 103, 104.

Malaga, climate and public health, 104.

Marbles, earthenware, and minerals, 171.

Mineral water, 171.

Mines of Huelva, 96.

Opportunity for astronomical instrument sellers, 391.

Ore exports to United States, 103.

Salt production, 94.

Spain and Mexico, copyright treaty between, 391.

Spinning :

Cotton, Japan, 357.

Machinery, ramie, 172.

Spirits, exports from Hungary, 449.

Steamship :

Communication, Austro-American, 243.

Line, new, from Trieste, 390.

Steel and iron :

Nova Scotia, 246.

Trade, Germany, 383.

Steel, hardening by gas, 118.

Straits Settlements :

Exports from Singapore to United States, 131.

Imports into, from United States, 130.

Imports of cotton goods into (1894), 132.

Machinery, 140.

Penang cotton-goods trade, 136.

Penang, sugar cultivation, 137.

Singapore cotton-goods trade, 132.

Statistics, 531.

Trade and industries, 129.

Strike, maritime, in Australia, 73.

Suez Canal business, 236.

Sugar :

Crop, new, of Europe, 508.

Cuban exports, 384.

Cultivation, Penang, 137.

Export of Austria-Hungary, 441.

Exports from Hungary, 449.

Exports from Martinique to United States, diversion of, 490.

Sweden and Norway, declared exports for United States, 329.

Swine plague, suppressing in Luxemburg, 298.

Swiss-Franco tariff war, 125.

Switzerland :

Certificates-of-origin shipments to, 247.

Cotton and silk industries, 75.

Declared exports for United States, 330.

Embroideries and cotton prints, 77.

Franco-Swiss tariff war, 125.

French commercial relations, 230.

Iron foundry and machine industry, 78.

Knitted underwear, 79.

Machine industry and iron foundry, 78.

Official commercial organ, 118.

Private insurance companies, 284.

Silk and cotton industries, 75.

Wages, 8.

Syria, new railroad, 380.

Tanning material, Québracho, 269.

Tariff :

Changes, proposed, in Martinique, for United States products, 489.

New, of Belgium, 62.

Tariff—Continued.

New, of Newfoundland, 53.

Supplementary, of the Dominican Republic, 119.

War, Franco-Swiss, 125.

Tariffs, interstate, in Mexico, 490.

Tax, license, Sierra Leone, 409.

Taxation and production of tea, Russia, 196.

Taxation of minerals in Mexico, 27.

Taxes:

Export on bananas, Nicaragua, 389.

Japan, 216.

Tea:

Japan, 215.

Taxation and production, Russia, 196.

Tehuantepec railroad contract, 33.

Telegraph and railway, Nicaragua, 242.

Telegraphs and railroads, Nicaragua, 387.

Textile, peat fiber, 261.

Tin-plate trade, South Wales, 185.

Tin plates and sheets, exports of, from Cardiff, 189.

Tobacco:

Administration, Hungary, 448.

Japan, 215.

Tolls, dry-dock, Kingston, Canada, 47.

Trades unions in Australia, 73.

Transportation of wheat in the Argentine Republic, 460.

Treaty between Central American States, 387.

Treaty between China and Japan, commercial advantage, 36.

Treaty between Egypt and Greece, 257.

Treaty, copyright, between Mexico and Spain, 391.

Trees, bitter-orange, for grafting, 529.

Trieste, new steamship line, 390.

Trout farms in Bohemia, 41.

Turin, cycle show, 48.

Tuxpan light-house, 248.

Unions:

Employers', in Australia, 72.

Trades, in Australia, 72.

United Kingdom:

British trade returns, 123, 255, 395, 535.

Declared exports for United States, 331.

Ireland, agricultural statistics, 370.

Ireland, American shoes, 273.

Manchester exports to United States, 248.

Ramie spinning machinery, 172.

Ramie yarns and cloths, 181.

Revival of the mohair trade, 366.

United Kingdom—Continued.

Scotland, potato trade, 201.

South Wales, exports of tin plates and sheets, 189.

South Wales tin-plate trade, 185.

United States:

Capital in Santo Domingo, 385.

Consular service and foreign trade, 456.

Consular service examinations, 208, 540.

Cuban manganese ore, 245.

Exports from Cuba, 228.

Exports from Manchester, 248.

Exports from Singapore, 131.

Exports to Austria-Hungary, 144.

Exports to Straits Settlements, 130.

Flour in Martinique, 486.

Fruit exports from Messina (1894-95), 142.

Fruit exports from Messina, Catania, and Palermo (1894-95), 141.

German machines, 111.

Importations of lemons into, from Palermo, 529.

Imports into Cuba, 229.

New York, diversion of Hawaiian trade to, from San Francisco, 385.

Ore exports to, from Spain, 103.

Products, proposed tariff changes for, in Martinique, 489.

Trade with Cuba, 228.

Trade with Mexico, 32.

United States-Cartagena mail service, 119.

United States, exports declared for:

Algeria, 305.

Austria-Hungary, 305.

Belgium, 307.

Brazil, 309.

British Africa, 309.

British India, 309.

Canada, 310.

Ceylon, 313.

Cuba, 313.

Denmark, 314.

Dutch West Indies, 315.

French North America, 312.

Germany, 315.

Gibraltar, 319.

Greece, 319.

Italy, 319.

Japan, 323.

Luxemburg, 324.

Mexico, 324.

New Zealand, 327.

United States, exports declared for—Continued.

Nicaragua, 327.

Russia, 327.

Spain, 328.

Sweden and Norway, 329

Switzerland, 330.

United Kingdom, 331.

Uruguay:

American opportunities, 344.

Cattle industry, 348.

National rural exhibition, 346.

Venezuela:

American trade opportunities, 204.

Salt industry, 293.

Victoria, agricultural statistics, 372.

Vine plant, new, 89.

Vintage, moselle (1895), 383.

Vital statistics of Malaga, 105.

Wages:

Austria, 12.

England, 6, 7.

Foreign countries 1.

Germany, 6.

Holland, 7.

Ireland, 7.

Italy, 7.

Mexico, 12.

Russia, 12.

Scotland, 7.

Switzerland, 75.

Yucatan, 497.

Wages and food prices, Australia, 69.

Wales (South):

Exports of tin plates and sheets, 189.

Tin-plate trade, 185.

Warsaw hygienic exposition, 523.

Weights and measures, Paris conference, 353.

Westphalian hams, 271.

Wheat transportation, Argentine Republic, 460.

Wine:

Exports from Hungary to India, 449.

Making, in France, 87.

Production of Europe, 93.

Wines:

American vs. European, 93.

Artificial, Portugal, 400.

Wooding of dunes in Denmark and Belgium, 51.

Woods, American demand for, in France, 384.

Wool market, Russia, 199.

Woolen industry in France, 275.

Yarns and cloths, ramie, 181.

Yucatan:

Agriculture, 499.

Commerce, 499.

Custom-house figures, 501.

Education, 498.

Exports, 500.

Imports, 500.

Labor conditions, 496.

Manufactures, 498.

Maya Indians, 497.

Railroads, 498.

Resources, commerce, etc., 495.

United States exporters, 500.

Wages, 497.

Zambesia, locust ravages, 530.

CONTRIBUTORS.

Adams, C. L. (consul, Cadiz), 94, 96.
 Armstrong, H. C. (chargé d'affaires, Madrid), 391.
 Ashby, N. B. (consul, Dublin), 524.
 Baker, W. E. (consul, Rosario), 460.
 Barker, W. B. (consul, Sagua la Grande), 228.
 Barrett, J. (consul-general, Bangkok), 184, 381.
 Bartleman, R. M. (secretary of legation, Caracas), 296.
 Bell, G. W. (consul, Sydney), 374.
 Bellet, H. P. du (consul, Rheims), 24.
 Bidlake, J. (consul, Barranquilla), 234, 526.
 Bigelow, H. R. (consul, Rouen), 275.
 Black, W. J. (consul, Nuremberg), 521.
 Bowen, H. W. (consul-general, Barcelona), 171.
 Breckinridge, C. R. (minister, St. Petersburg), 364.
 Brühl, L. H. (consul, Catania), 142.
 Buchanan, W. I. (minister, Buenos Ayres), 477.
 Burke, D. N. (consul, Malaga), 104.
 Butler, E. C. (secretary of legation, Mexico), 31, 33.
 Caughy, C. M. (consul, Messina), 141.
 Chancellor, C. W. (consul, Havre), 25, 27, 83, 87, 260, 265, 280.
 Comfort, S. (vice-consul, Bombay), 391.
 Crane, E. P. (consul, Hanover), 117.
 Crittenden, T. T. (consul-general, Mexico), 27.
 Dean, F. A. (consul, Naples), 528.
 Doederlein, O. (consul, Leipsic), 161.
 Donnelly, J. G. (consul-general, Nuevo Laredo), 490.
 Drayton, J. (consul, Tuxpan), 248.
 Eckford, Q. O. (consul, Kingston, Jamaica), 114.
 Ernst, G. R. (consul, Reichenberg), 144.
 Eustis, J. B. (ambassador, France), 353.
 Fitzgerald, F. (consul, Cognac), 86.
 Flagg, E. M. (vice-consul, Asuncion), 351.
 Fowler, J. (consul, Ningpo), 41, 248.
 Germain, E. (consul, Zurich), 75, 118, 230, 243, 247, 284, 384.

Gibson, T. R. (consul, Beirut), 380.
 Gorman, J. B. (consul, Matamoros), 32, 389.
 Grimke, A. H. (consul, Santo Domingo), 119, 385.
 Grinnell, W. F. (consul, Manchester), 248.
 Hale, C. E. (vice-consul, Guaymas), 120.
 Hammond, E. P. T. (consul, Budapest), 243, 436, 437, 439, 440, 441, 442, 444, 445, 446, 447, 448, 449.
 Hollis, W. S. (consul, Mozambique), 121, 391, 530.
 Horton, G. (consul, Athens), 80.
 Howells, A. (consul, Cardiff), 185.
 Hyatt, P. F. (consul, Santiago de Cuba), 245.
 Jackson, J. B. (secretary of embassy, Berlin), 116, 120, 121.
 Jernigan, T. R. (consul-general, Shanghai), 34, 36, 38, 354, 531.
 Johnson, A. C. (consul, Stuttgart), 459.
 Jones, W. S. (consul-general, Rome), 120, 202, 527, 528.
 Judd, M. (consul-general, Vienna), 378, 390.
 Karel, J. (consul-general, St. Petersburg), 13, 15, 17, 20, 21, 22, 196, 198, 199.
 Kay, C. de (consul-general, Berlin), 41, 107, 290, 431.
 Kirk, R. J. (consul, Copenhagen), 50, 51, 527.
 Latimer, W. H. (vice and deputy consul, San Juan, P. R.), 503.
 Lederer, F. (consular agent, Penang), 136.
 Little, W. M. (consul, Tegucigalpa), 387.
 McDaniel, R. P. (consul, Bahia), 291.
 McIvor, N. W. (consul-general, Kanagawa), 221.
 Mantius, W. E. (commercial agent, Turin), 48.
 Maratta, D. W. (consul-general, Melbourne), 69, 244, 372, 530.
 Mason, F. H. (consul-general, Frankfort), 434, 508.
 Meeker, C. (consul, Bradford,) 172, 300, 366.
 Merritt, H. F. (consul, Barmen), 238, 267, 269, 271, 425, 510.
 Mertens, T. (consular agent, Valencia), 391.
 Mills, E. (consul-general, Honolulu), 385.

- Monaghan, J. C. (consul, Chemnitz), 111, 118, 241.
- Morris, H. C. (consul, Ghent), 189, 390.
- Morss, S. E. (consul-general, Paris), 183.
- Murphy, G. H. (vice-commercial agent, Luxemburg), 112, 245, 298, 299, 383.
- O'Hara, T. (consul, San Juan del Norte), 236, 242, 247, 387, 505, 507.
- Oliver, R. L. (consul, Merida), 495.
- Pendleton, M. P. (consul, Pictou), 246.
- Piatt, A. Donn (vice and deputy consul, Dublin), 370.
- Pierce, R. H. D. (chargé d'affaires *ad interim*, St. Petersburg), 410.
- Plumacher, E. H. (consul, Maracaibo), 204.
- Pooley, R. P. (consul, Sierra Leone), 401, 408.
- Pratt, E. S. (consul-general, Singapore), 129, 132, 134, 137, 140.
- Quiggle, J. C. (commercial agent, Collingwood), 276.
- Rawicz, J. (consul, Warsaw), 523.
- Risley, J. E. (minister, Copenhagen), 246.
- Robertson, W. H. (consul, Hamburg), 110, 116, 516.
- Roncière, de La (vice-consul, Pointe-à-Pitre), 529.
- Roosevelt, G. W. (consul, Brussels), 62.
- Ryan, S. (consul, St. John's, N. F.), 53, 244.
- Savage, J. M. (consul, Dundee), 201.
- Schramm, E. (consul, Montevideo), 344, 348.
- Seymour, W. H. (consul, Palermo), 119, 142, 385, 528, 529.
- Sill, J. M. B. (consul-general, Seoul), 302.
- Smith, H. C. (consul, Santos), 113.
- Smyth, C. (consul, Cartagena), 119, 243, 502.
- Stephan, T. M. (consul, Annaberg), 220, 243, 245, 297, 450, 512, 513, 514.
- Stern, L. (commercial agent, Bamberg), 296.
- Taney, J. B. (consul, Belfast), 181, 273.
- Thompson, T. L. (minister, Rio de Janeiro), 526.
- Tingle, E. W. S. (consul, Brunswick), 456.
- Townes, W. T. (consul-general, Rio de Janeiro), 241.
- Tucker, J. G. (consul, Martinique), 478, 481, 486, 489, 490.
- Twitchell, M. H. (consul, Kingston, Canada), 47.
- Wamer, W. D. (consul, Cologne), 108, 383.
- Washington, H. L. (vice and deputy consul-general, Cairo), 242, 257, 260, 384.
- Wetter, E. T. (acting consul, Tamatave), 285.
- Whidden, E. (consul, St. Stephen), 386.
- Willett, E. W. (commercial agent, St. George's), 526.
- Williams, R. O. (consul-general, Habana), 384, 523.

